

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

SMARTREND MANUFACTURING
GROUP (SMG), INC.,

Plaintiff,

Case Nos. 1:21-cv-1009, 1:22-cv-915

v.

Hon. Hala Y. Jarbou

OPTI-LUXX, INC.,

Defendant.

OPINION

Plaintiff Smartrend Manufacturing Group (SMG), Inc. (“SMG”) brings this action for patent infringement against Defendant Opti-Luxx, Inc. (“OLI”). Plaintiff alleges that Defendant infringed two of its patents, a design patent and a utility patent. There are two patents and two cases before the Court. For ease of discussion, these cases will generally be referred to as one case, as if they were consolidated. Where it is necessary to distinguish between the two cases, such as when referencing exhibits, the Court will refer to the applicable patent’s shorthand description. Thus, Case No. 1:21-cv-1009 will be referred to as the “D930 Case,” because that case involves Patent D932,930, while Case No. 1:22-cv-915 will be referred to as the “491 Case” because that case involves Patent 11,348,491.

Before the Court are multiple cross motions for summary judgment (D930 Case, ECF Nos. 53, 80; 491 Case, ECF Nos. 26, 30), Plaintiff’s motion to dismiss certain counterclaims (491 Case, ECF No. 19), and Defense’s motion for claim construction (491 Case, ECF No. 46). This Court has subject matter jurisdiction under 20 U.S.C. § 1331 and § 1338(a).

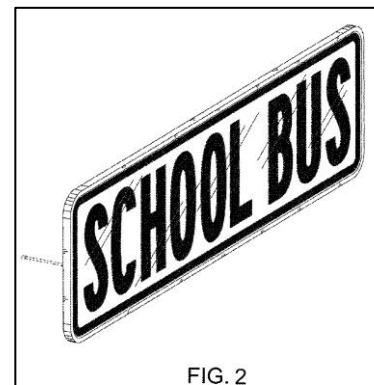
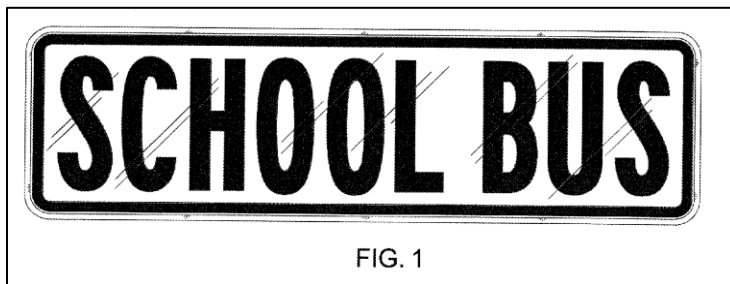
I. FACTUAL BACKGROUND

Plaintiff SMG is a Canadian manufacturer and supplier that manufactures illuminated school bus signs through its First Light Safety Products division. SMG holds the two patents at issue in this case: U.S. Design Patent No. D932,930 (the “D930 Patent”) and U.S. Patent No. 11,348,491 (the “491 Patent”). (*See* D930 Case, Am. Compl., ECF No. 19; 491 Case, Compl., ECF No. 1.)

Defendant OLI is a Michigan-based designer and developer of vehicle-related illuminated safety signage. It also markets illuminated school bus signs, originally through its predecessor corporation, SoundOff Commercial Vehicle Solutions, and now through its current legal and trade name, Opti-Luxx. (*See* 491 Case, Def.’s Resp. to Pl.’s Mot. for Summ. J., ECF No. 31.)

A. The D930 Patent

SMG’s D930 patent is an “ornamental design for an LED light panel[.]” (*See* D930 Case, D930 Patent, ECF No. 53-2, PageID.765.) For illustration purposes, figures 1 and 2 of the patent are reproduced below. (*See id.*, PageID.765, 767.) The shading lines visible in both figures “denote transparency.” (*Id.*, PageID.765.) The patent application was submitted on December 20, 2017, and issued on October 12, 2021. (D930 Case, Def.’s Br. Mot. for Summ. J. 9, ECF No. 53-1.) SMG claims, and OLI does not appear to dispute, a priority date for this patent of December 20, 2017.



B. The 491 Patent

SMG's 491 patent is a utility patent that describes a self-contained illuminated sign designed to be mounted onto vehicles, including, but not limited to, school buses. (491 Case, 491 Patent 4:46-50, ECF No. 32-1.) The invention claimed consists of a single independent claim and multiple dependent claims. The independent claim, in full, is as follows:

1. An illuminated school bus sign for direct mounting on a school bus, the sign comprising:

opaque lettering positions on or over a front surface of a translucent panel;

an opaque rear panel situated opposite to the translucent panel in spaced relation therefrom to define a space therebetween;

a light source comprising a plurality of LEDs positioned in the space adjacent to the rear panel and pointing towards a front of the sign; and

frame surrounding a perimeter of the translucent panel and forming a perimeter of the sign for mounting the sign to the school bus,

wherein the translucent panel is spaced by a spacer from the LEDs thereby creating a gap between the LEDs and the translucent panel,

wherein the spacer surrounds the LEDs and supports a rear surface of the translucent panel along the entire perimeter of the translucent panel, and

wherein the entire perimeter of the translucent panel is sealed in a weather-tight manner by a weather-tight seal between the translucent panel and the spacer.

(*Id.* at 22:52-23:6.)

There are several dependent claims that flow from Claim 1. Most relevant to this case are the following:

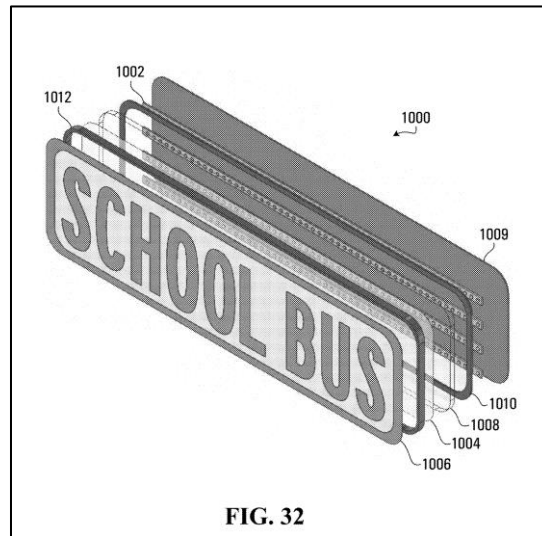
3. The sign of claim 1, wherein the frame comprises one or more through holes for direct mounting the sign to the school bus

...

5. The sign of claim 1, wherein the LEDs are arranged in rows.
6. The sign of claim 1, wherein the LEDs are mounted to the rear panel.
- ...
8. The sign of claim 1, wherein the frame is a single piece.
9. The sign of claim 1, wherein the gap is sized to provide substantially uniform illumination emitted from the translucent panel.
- ...
11. The sign of claim 1, wherein a contact between the translucent panel and the spacer is sealed in a weather-tight manner.
12. The sign of claim 1, wherein the translucent panel is adhered to the spacer.
13. The sign of claim 1, wherein the spacer is connected to the rear panel.
14. The sign of claim 1, wherein the spacer has a width parallel to the translucent panel and is positioned behind the perimeter of the translucent panel.

(*See id.*)

The patent includes many possible iterations of the invention, called embodiments. These embodiments are described both through written description, called specifications, and representative illustrations. While these illustrations should not be taken as the only possible configuration of the invention claimed, *see Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005), they do provide useful context for understanding the content of the claims. One such useful illustration is figure 32, reproduced here:



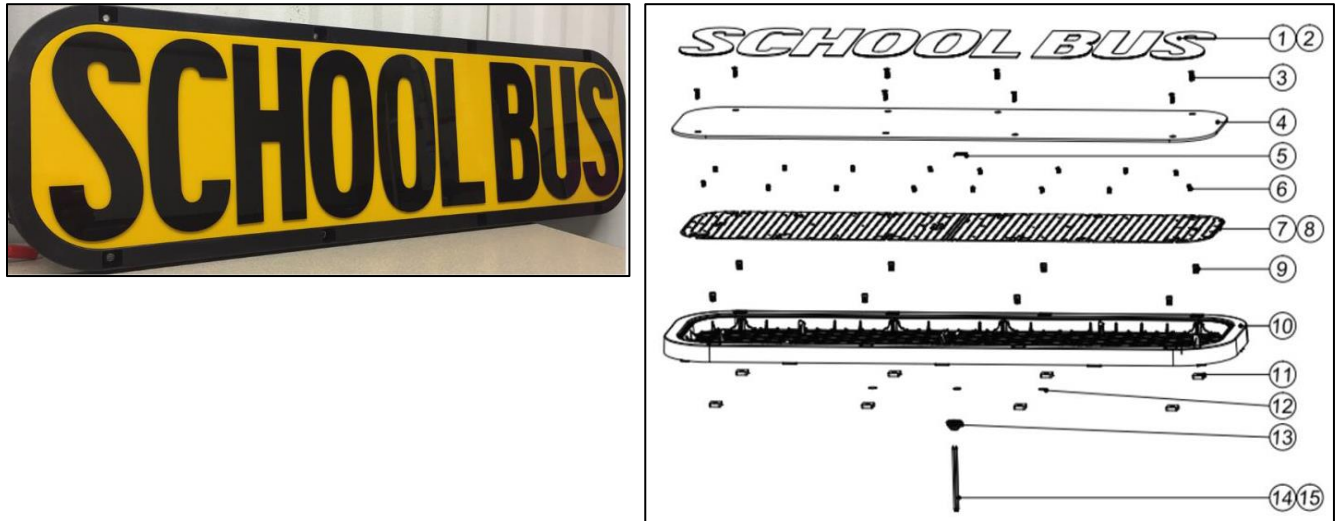
(See 491 Patent, PageID.1001.)

The patent application was first filed as a provisional application on March 1, 2018, and eventually issued in its final form on May 31, 2022. (*See id.* at 1-2.) SMG modified and refined its claims throughout the approval process, in conversation with the patent officer. This patent prosecution history is included in evidence (*see* 491 Case, Patent Prosecution, ECF No. 32-5), but will not be recounted in detail here. Relevant portions of the prosecution history will be included in the analysis below.

C. The Accused Product

This lawsuit was set in motion when SMG became aware that OLI was “likely developing a competing,” allegedly infringing, “illuminated school bus sign.” (*See* D930 Case, Am. Compl. ¶ 12, ECF. No. 19.) As OLI describes its product, its illuminated sign includes “three main structural components”: a rigid plastic housing shaped as a “tub,” an LED light board fixed within the housing, and a translucent yellow cover panel bonded to the inwardly extending “lip” of the tub. (*See* 491 Case, Def.’s Resp. to Pl.’s Mot. for Summ. J. 13, ECF No. 41.) The product also contains built-in mounting holes for mounting the sign onto a school bus. (*See* 491 Case, March 12, 2022 Letter from OLI to SMG, ECF No. 27-10, PageID.619.)

Photographs and technical drawings comprise the bulk of the direct evidence related to the accused product. Two representative depictions are reproduced here:



(See 491 Case, ECF Nos. 27-5, 27-9.)

The parties disagree on the design and function of particular elements of the sign. For example, Plaintiff contends the LED panel (components 7 and 8 in the preceding “exploded view” illustration) is spaced between the translucent panel and the back panel by the walls of the plastic housing (component 10). (See 491 Case, York Report ¶ 72, ECF No. 27-6.) Defendant, by contrast, maintains such spacing is achieved by “projections” of different lengths extending up from the bottom panel of the housing. The LED panel rests on the shorter projections and are attached via screws (component 6), while the translucent panel rests on the longer projections. (See 491 Case, Carrier Report ¶ 61, ECF No. 27-8.) The parties dispute other aspects as well, discussed in more detail in the analysis section below.

II. PROCEDURAL HISTORY

The procedural history of this case is convoluted and will not be recounted in detail here. SMG ultimately seeks (1) declaratory judgment that its patents are valid, and that OLI has infringed

those patents; (2) injunctive relief; and (3) treble damages and attorney's fees. (*See* D930 Case, Am. Compl. 8; 491 Case, Compl. 10, ECF No. 1.)

OLI denies that its product infringes on either patent. (*See* D930 Case, Def.'s Answer to Am. Compl., ECF No. 21, PageID.197-201; 491 Case, Def.'s Answer 12-16, ECF No. 11.) It also asserts several affirmative defenses, including patent invalidity, failure to mitigate damages, and laches, waiver, equitable estoppel, prosecution history estoppel, and unclean hands. (*See* D930 Case, Def.'s Answer to Pl.'s Am. Compl, PageID.202-204; 491 Case, Def.'s Answer 16-19.) Finally, OLI also counterclaims, seeking (1) declaratory judgment that both the D930 and 491 patents are invalid and unenforceable; (2) treble damages and attorney's fees for SMG's alleged violation of federal antitrust laws; and (3) damages and injunctive relief for alleged tortious interference. (*See* D930 Case, Def.'s Answer to Pl.'s Am. Compl., PageID.207-209; 491 Case, Def.'s Answer 21-27.)

While there are numerous claims, counterclaims, and affirmative defenses, this Opinion will be limited to those issues involved in the motions before the Court. Those motions are as follows. For the D930 Case, OLI's motion for summary judgment on patent invalidity and infringement (ECF No. 53) and SMG's motion for partial summary judgment on prior art (an issue related to patent invalidity) (ECF No. 80). For the 491 Case, SMG's motion for summary judgment on infringement (ECF No. 26), OLI's motion for summary judgment on infringement (ECF No. 30), and OLI's motion for claim construction (ECF No. 46). Also for the 491 Case is SMG's motion to dismiss OLI's second and third counterclaims related to alleged antitrust violations and tortious interference (ECF No. 19).

III. STANDARDS AND LEGAL BACKGROUNDS

A. Summary Judgment

Summary judgment is appropriate “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). A fact is material if it “might affect the outcome of the suit.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A material fact is genuinely disputed when there is “sufficient evidence favoring the nonmoving party for a jury to return a verdict for that party.” *Id.* at 249 (citing *First Nat’l Bank of Ariz. v. City Serv. Co.*, 391 U.S. 253, 288-89 (1961)). Summary judgment is not an opportunity for the Court to resolve factual disputes. *Id.* The Court “must shy away from weighing the evidence and instead view all the facts in the light most favorable to the nonmoving party and draw all justifiable inferences in their favor.” *Wyatt v. Nissan N. Am., Inc.*, 999 F.3d 400, 410 (6th Cir. 2021).

“This standard of review remains the same for reviewing cross-motions for summary judgment.” *Ohio State Univ. v. Redbubble, Inc.*, 989 F.3d 435, 411 (6th Cir. 2021). “[A] case involving cross-motions for summary judgment requires ‘evaluat[ing] each party’s motion on its own merits, taking care in each instance to draw all reasonable inferences against the party whose motion is under consideration.’” *Id.* at 442 (quoting *EMW Women’s Surgical Ctr., P.S.C. v. Beshear*, 920 F.3d 421, 425 (6th Cir. 2019)). Further, summary judgment on affirmative defenses is appropriate. *Speedeon Data, LLC v. Integrated Direct Marketing, LLC*, 718 F. App’x 333, 337 (6th Cir. 2017). “For an affirmative defense, the defendant has the burden to show that it is entitled to the defense.” *Id.*

B. Motion to Dismiss

Under Rule 12(b)(6) of the Federal Rules of Civil Procedure, the Court may dismiss a complaint for failure to state a claim. “While a complaint need not contain detailed factual

allegations, a plaintiff's allegations must include more than labels and conclusions.” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007); *see also Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). The Court must determine whether the complaint contains “enough facts to state a claim to relief that is plausible on its face.” *Twombly*, 550 U.S. at 570. “A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged.” *Iqbal*, 556 U.S. at 679. “[W]here the well-pleaded facts do not permit the court to infer more than the mere possibility of misconduct, the complaint has alleged—but has not ‘show[n]’—that the pleader is entitled to relief.” *Id.* (quoting Fed. R. Civ. P. 8(a)(2)).

When considering a motion to dismiss under Rule 12(b)(6), courts “construe the complaint in the light most favorable to the plaintiff, accepting all well-pleaded factual allegations as true.” *Parrino v. Price*, 869 F.3d 392, 397 (6th Cir. 2017). The Court need not accept “threadbare recitals of the elements of a cause of action, supported by mere conclusory statements,” *Iqbal*, 556 U.S. at 678, or “formulaic recitations of the elements of a cause of action,” *Twombly*, 550 U.S. at 555.

Courts are generally bound to consider only the complaint when resolving a motion to dismiss unless the Court converts the motion to one for summary judgment. *Wysocki v. Int’l Bus. Mach. Corp.*, 60 F.3d 1102, 1104 (6th Cir. 2010). “However, a court may consider exhibits attached to the complaint, public records, items appearing in the record of the case, and exhibits attached to defendant’s motion to dismiss, so long as they are referred to in the complaint and are central to the claims contained therein, without converting the motion to one for summary judgment.” *Gavitt v. Born*, 835 F.3d 623, 640 (6th Cir. 2016).

IV. ANALYSIS

A. Cross Motions on the D930 Patent

OLI seeks summary judgment on SMG's patent infringement claim and its affirmative defense that the D930 patent is invalid. SMG filed a motion for summary judgment on an evidentiary issue related to invalidity. To reiterate, D930 is a design patent.

1. Defendant's Motion for Summary Judgment on Patent Infringement

35 U.S.C. § 171 allows an inventor to obtain a patent for "any new, original and ornamental design for an article of manufacture." A design patent "protects the nonfunctional aspects of an ornamental design as shown in the patent." *See Elmer v. ICC Fabricating, Inc.*, 67 F.3d 1571, 1577 (Fed. Cir. 1995).

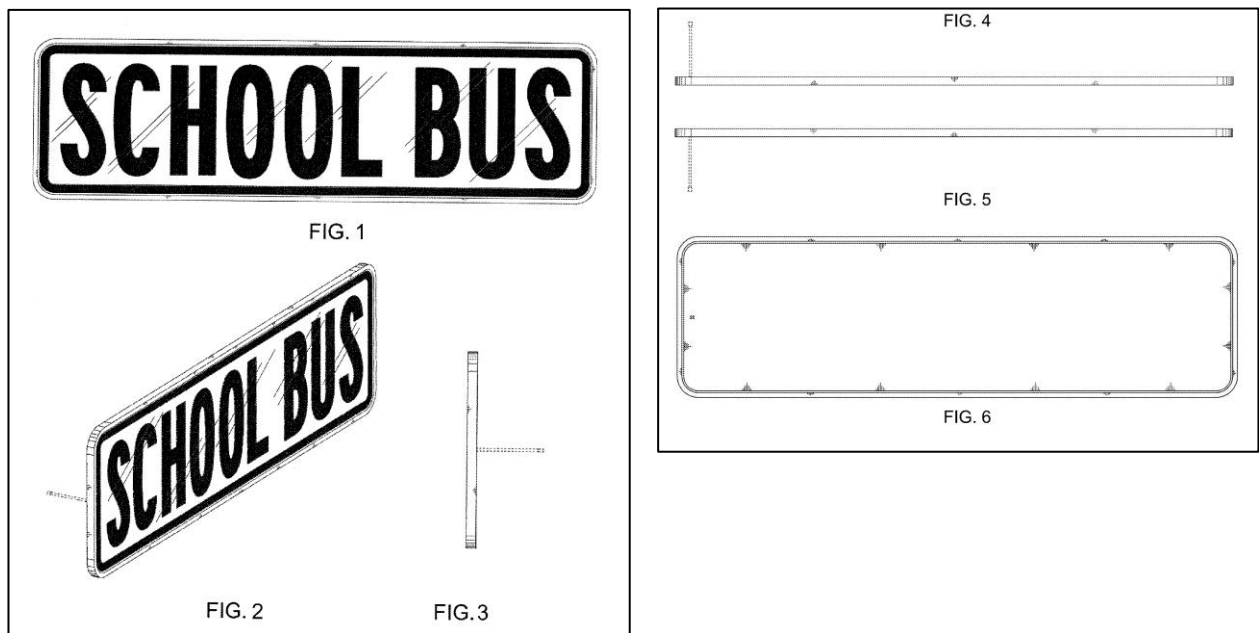
Design patent infringement is assessed using the ordinary observer test. The aim of this test is to determine whether "in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, . . . inducing [the purchaser] to purchase one supposing it to be the other." *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 670 (Fed. Cir. 2008). The test is comprised of two parts; the first part is resolved by the Court while the second part is resolved by the finder of fact. "(1) The court first construes the claim to determine its meaning and scope; [and] (2) the fact finder then compares the properly construed claim to the accused design." *Lanard Toys Ltd. v. Dolgencorp LLC*, 958 F.3d 1337, 1341 (Fed. Cir. 2020).

(a) Design Patent Claim Construction

Claim construction in the design patent context focuses more on pictorial description than written. Indeed, the Federal Circuit "has cautioned, and continues to caution, trial courts about excessive reliance on a detailed verbal description in a design infringement case." *Crocs, Inc. v. Int'l Trade Comm'n*, 598 F.3d 1294, 1302 (Fed. Cir. 2010). Thus, this Court will not undertake a

detailed written description of the D930 patent and instead will rely on the applicable exemplary drawings contained in the patent.

The D930 contains 10 exemplary figures. Figures 1-6 are the embodiments most relevant to this case, while Figures 7-10 merely repeat Figures 1-2 with different wording on the illuminated sign. Figures 1-3 depict the sign directly from the front, angled from the front and top, and directly from the side. Figures 4-6 depict the sign directly from the top, bottom, and back. (*See* D930 Patent, PageID.767-768.) These are produced below:



Note, the line protruding from behind the sign (e.g., behind the “S” in Figure 2) is not a claimed element of the design. Note also, the diagonal striping behind “School Bus” denotes “transparency” (a contentious point discussed further below). (*Id.*, PageID.765.)

The Court next considers the functional features of the design. Functional elements are not protected by a design patent, and thus “[w]here a design contains both functional and non-functional elements, the scope of the claim must be construed in order to identify the non-functional aspects of the design as shown in the patent.” *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1293 (Fed. Cir. 2010). “If . . . a design contains both functional and ornamental

features, the patentee must show that the perceived similarity is based on the ornamental features of the design” and “that an ordinary person would be deceived by reason of the common features in the claimed and accused designs which are ornamental.” *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1405 (Fed. Cir. 1997).

OddzOn illuminates a key distinction between an ornamental aspect and a functional one. At issue in that case was a design patent for a “rocket-like tossing ball.” *Id.* The ornamental features were those elements that produced “the overall ‘rocket-like’ appearance of the design.” *Id.* The functional features, on the other hand, were those elements necessary to create a ball “specifically designed to be thrown like a football, yet travel farther than a traditional foam football.” *Id.* Thus, the “football shape combined with fins on a tail” were the unprotected functional elements while the “football-shaped ball, slender tailshaft, and three fins which seemingly protrude out of the football and gently flare outwardly” were the protected ornamental elements that created the rocket-like appearance. *Id.* at 1406.

In its argument that the design patent is invalid, OLI asserts that “all elements of the claimed design are clearly dictated by function.” (D930 Case, Def.’s Br. in Supp. of Mot. for Summ. J. 15.) To support this contention, it cites deposition testimony of the D930 inventor, Kevin Smith, who said, “I think for product [design] . . . it needs to be both functional . . . and . . . aesthetic.” *Id.* at 16. But this statement merely confirms that design patents often feature elements that are both ornamental and functional, an unremarkable point well supported in case law. *See, e.g., Lanard Toys*, 958 F.3d at 1342.

OLI also points to the National Highway Traffic Safety Administration (NHTSA)’s Uniform Guidelines for State Highway Safety Programs as evidence that the particular phrase, “formatting[,] and stroke of the characters are dictated by federal and/or state law.” (D930 Case,

Def.’s Br. in Supp. of Mot. for Summ. J. 21.) Setting aside the fact that NHTSA guidelines are not federal law and merely provide “strategies for minimizing . . . death or injury” (*see* D930 Case, NHTSA, *Highway Safety Program Guideline No. 17 Pupil Transp. Safety* 1 (2009), ECF No. 77-8), the guideline cited does nothing more than advise that “the words ‘School Bus’ [be] printed in letter not less than eight inches high.” (*Id.*) In its rebuttal brief, OLI does cite a few state statutes and regulations to bolster its contention. (*See* D930 Case, Def.’s Reply to Pl.’s Br. Opp. to Summ. J. 17-18.) Ultimately, these citations do not move the needle for OLI, as discussed in further detail in the invalidity section below.

The Court disagrees with OLI that the evidence adduced establishes that “each and every aspect claimed” is functional or otherwise “dictated . . . by statute.” (D930 Case, Def.’s Br. in Supp. of Mot. for Summ. J. 16.) Without reducing the patented design to a written description, much of what gives this design its overall appearance is not functional. The general shape of the rectangular sign with rounded corners is not functional—such a shape is not necessary for an illuminated sign. Nor is the width, height, or thickness of the sign. Nor is the black border enclosing the phrase “SCHOOL BUS.” Relatedly, while the phrase “SCHOOL BUS” itself is likely functional or otherwise unpatentable, the specific style of the lettering is not. Beyond this, the only elements that this Court views as functional are the transparent panel and the opaque lettering of “SCHOOL BUS.” The transparency and opacity of these elements are necessarily functional in the context of an illuminated school bus sign. The transparency allows light to pass through the panel in order to emphasize the featured phrase, which can only be achieved if the phrase itself does not allow the light to pass through (*i.e.*, is opaque).

The Court notes the disagreement between the parties’ definition of “transparency.” SMG contends that transparent in its patent is interchangeable with translucent, while OLI contends that

the two are mutually exclusive. This Court agrees with SMG's definition for purposes of OLI's motion for summary judgment. OLI provides no evidence for its definition of transparency while SMG cites case law, its expert report, and the Manual of Patent Examining Procedure ("MPEP").

SMG cites *Nichia Corp. v. Global Value Lighting, LLC.*, No. CV 19-1388-RGA, 2020 WL 6318688 (D. Del. Oct. 28, 2020). Although this is a single, nonbinding opinion, it does support SMG's contention that "transparent" need not be mutually exclusive with "translucent." That court, in a patent case in the field of light emitting devices, rejected the defendant's construction which would have required "one be able to see 'clearly and distinctly' through any 'transparent' element of the device." *Id.* at *6. OLI argues that the case is inapposite because SMG specifically and exclusively chose the term "transparent" in its patent whereas the *Nichia* patent mentioned both words. The point is well taken. But the *Nichia* court examined the intrinsic record of the patent as a whole to make its determination. It did not resort to the popular definition of words to construct the claim. *Nichia*, therefore, supports the idea that "transparent" needs to be construed by reference to the patent itself, and that in doing so it is possible to give it a meaning synonymous with translucent.

SMG's expert represents that he is "an expert in lighting and electronic systems." (D930 Case, York Report ¶ 6, ECF No. 77-15.) He further represents that the definition "where 'transparent' simply means that a medium or material is able to transmit at least some of the . . . light through it" is "important in light emission design" because many materials that "are classically thought of as 'transparent'" in fact have varying degrees of "imperfections" that "give rise to a spectrum of possible behavior." (*Id.* ¶ 44.) In other words, "there is no hard line on the amount of light scattering required to consider a material 'transparent' versus translucent[.]" (*Id.*) OLI does not offer evidence of a competing industry definition.

SMG also cites MPEP guidelines that note “oblique line shading must be used to show transparent, translucent and highly polished or reflective surfaces, such as a mirror.” MPEP 1503.02. Thus, it suggests that the oblique line shading can represent both transparency and translucency so the terms must not be mutually exclusive. The Court finds this less persuasive. As OLI points out, SMG did not merely use oblique lines or quote directly from the MPEP in its patent claim. It did choose the word transparent. This is not to say that the definitions cannot co-exist, merely that citation to the MPEP does not meaningfully bolster SMG’s argument.

Weighing the evidence proffered in favor of SMG, this Court agrees with SMG’s construction of transparency as capable of being synonymous with translucency for purposes of this motion. This is OLI’s motion for summary judgment, and OLI has not persuasively met each of SMG’s pieces of evidence.

(b) Design Patent Infringement

Once a claim is properly construed by the Court, the finder of fact takes over to apply the ordinary observer test. Infringement is found “[i]f, in the eye of an ordinary observer, giving such attention as a purchaser usually gives, two designs are substantially the same, if the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other.” *Egyptian Goddess*, 543 F.3d at 670. The focus of the comparison must be on “overall designs, not similarities of ornamental features in isolation.” *Lanard Toys*, 958 F.3d at 1343.

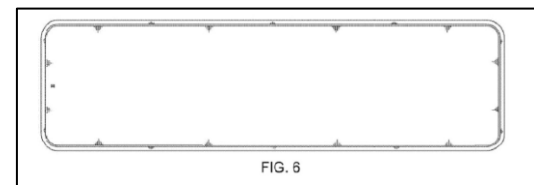
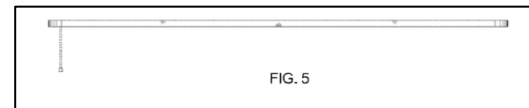
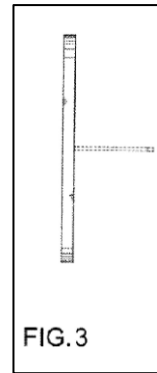
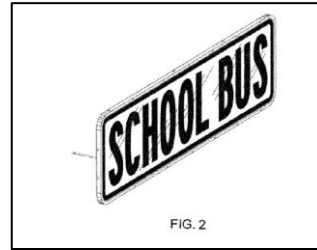
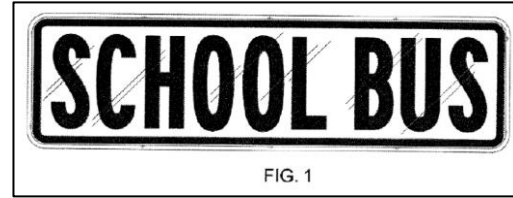
The identity of the ordinary observer is a predicate question. *See Arminak & Assocs., Inc. v. Saint-Gobain Calmar, Inc.*, 501 F.3d 1314, 1321 (Fed. Cir. 2007), *abrogated on other grounds by Egyptian Goddess*, 543 F.3d at 678. The appropriate ordinary observer is not necessarily the end-user or retail customer; rather, it can be the “commercial or industrial buyers of designed items that are used as component parts assembled into a retail product.” *Id.* at 1322.

SMG and OLI disagree about who the appropriate ordinary observer should be in this instance. OLI argues it should be “a commercial purchaser who is more sophisticated than a normal retail purchaser” and who is “attuned to the requirements of his employer . . . the school bus manufacturer.” (D930 Case, Def.’s Br. in Supp. of Mot. for Summ. J. 24.) OLI provides no evidence for its conclusion. SMG argues the ordinary observer “is far less sophisticated.” (D930 Case, Pl.’s Resp. to Def.’s Mot. for Summ. J. 25, ECF No. 77.) While SMG sells its products “across the entire school bus supply chain,” it notes that “the main driver of sales [is] the individual school districts.” (*Id.*) School districts, as opposed to more sophisticated buyers up the chain, “do not care about minute aspects of the sign, as long as the look is correct and it can be installed on buses.” (*Id.*) To support this contention, it points to a declaration by its president and D930 inventor, Kevin Smith, as well as the findings of its expert.

For purposes of OLI’s summary judgment motion, OLI has failed to present evidence to support its relatively more sophisticated ordinary observer. Drawing all inferences in favor of SMG, the Court will consider the school district as the ordinary observer.

OLI argues that no matter the relative level of sophistication, any ordinary observer would “readily perceive the striking differences in ornamental appearance between the D930 Patent claim and the Accused Device.” (D930 Case, Def.’s Reply 11-12, ECF No. 78.) It points to differences such as the accused product’s beveled frame, the lack of a black band around the perimeter of the sign, the positioning of the lettering, the appearance of mounting holes, and a backside with “a thin lip and recessed area . . . rather than the border disclosed in the D930 Patent.” In its rebuttal

brief, OLI presents a series of side-by-side demonstrations of the photographs and drawings in evidence, reproduced here with the accused product on the left and the D930 figures on the right:



(*See* D930 Case, ECF Nos. 69, 70).

To OLI, “[t]he striking differences are readily perceived from [these] images[.]” (*Id.* at 5.) The Court is not convinced. While individual differences are indeed visible, OLI does not connect these differences to how the ordinary observer would perceive the overall design. In other words, OLI improperly “concentrate[s] on small differences in isolation[,] distract[ing] from the overall impression of the claimed ornamental features.” *Crocs*, 598 F.3d at 1303-04.

SMG meets OLI’s contentions, at least raising a genuine dispute of material fact as to the impact of the perceived differences. For instance, regarding the bevel noted by OLI, SMG argues that “[t]he slight angle identified by [OLI] is a draft angle of no more than five degrees, which is difficult to even distinguish when compared side-by-side with the D930 patent.” (D930 Case, Pl.’s Resp. to Def.’s Mot. for Summ. J. 28-29.)

Two asserted differences warrant further discussion. OLI contends its product “does not practice the ornamental design of the frame and back side . . . for the reason that [its] frame contains square holes/depressions around the perimeter . . . and has a back-side which is remarkably dissimilar to the D930 back-side in every way.” (D930 Case, Def.’s Br. in Supp. of Mot. for Summ. J. 22.) Regarding the holes in the perimeter, SMG argues that OLI admitted these holes are “recessed and into the border of the illuminated sign” such that they wouldn’t be visible to the ordinary observer when mounted. (D930 Case, Pl.’s Resp. to Def.’s Mot. for Summ. J. 30.)

Regarding the backside, SMG argues two points. First, that a reasonable jury could find that the recessed area creates a similar impression to the D930 backside, “namely a surrounding border or edge[.]” Second, that “the rear of the design is not viewable once installed” such that “the ordinary observer would not find the rear recessed area to affect [the] overall impression of the designs when installed.” (*Id.* at 31.)

As a matter of law, the ordinary observer test “must encompass all ornamental features visible at any time during normal use of the product,” which extends from the point “beginning after completion of manufacture or assembly and end[s] with the ultimate destruction, loss or disappearance of the article.” *Contessa Good Prods., Inc. v. Conagra, Inc.*, 282 F.3d 1370, 1379, 1381 (Fed. Cir. 2002), *abrogated on other grounds by Egyptian Goddess*, 543 F.3d at 678. The purchase of the school bus sign and the subsequent mounting are both relevant points during the life of the product, between which points the holes and backside would be visible. Thus, the Court disagrees with SMG’s implied argument that these differences are irrelevant because they are invisible once mounted.

These differences should, however, be put in the proper context of a test which calls for “the eye of an ordinary observer, giving such attention as a purchaser usually gives.” *Egyptian Goddess*, 543 F.3d at 670. As such, it would be reasonable to conclude that the ordinary observer (for purposes of this summary judgment motion, a school district) would focus more on the visible portion of the sign rather than those portions of the sign which will be obscured or invisible once mounted. This is not to say the differences are irrelevant. Rather, it is to give proper weight to the various features, with their similarities and dissimilarities, in determining the effect on the overall appearance. This is the sort of evidentiary weighing that a reasonable jury would do.

Without recounting each and every contention of the parties, it is clear from the record that, when drawing all reasonable inferences in favor of SMG, it has at least created a genuine dispute of material fact as to whether an ordinary observer would find the D930 patent and the accused product to be “substantially the same.” At this stage, OLI has not established that no reasonable jury could find the accused product to have infringed the D930 patent.

2. Patent Invalidity

Patent invalidity is an affirmative defense to patent infringement. The burden rests on the party asserting it. 35 U.S.C. § 282. A patent, whether design or utility, “shall be presumed valid.” *Id.* § 282(a), § 171(b). This presumption requires a party to prove patent invalidity by clear and convincing evidence. *See Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, 796 F.3d 1312, 1328 (Fed. Cir. 2015). OLI asserts several grounds for why this Court should invalidate SMG’s D930 patent: (1) the design is entirely dictated by functional considerations, (2) the design is obvious in light of prior art, and (3) the design patent is indefinite. (D930 Case, Def.’s Br. in Supp. of Mot. for Summ. J. 13-19.)

(a) Functionality

“A design patent can be declared invalid if the claimed design is primarily functional rather than primarily ornamental[.]” *High Point Design LLC v. Buyers Direct, Inc.*, 730 F.3d 1301, 1315 (Fed. Cir. 2013) (internal quotations omitted). Whether a design is dictated by function can be assessed using the factors laid out in *PHG Technologies, LLC v. St. John Cos.*, 469 F.3d 1361 (Fed. Cir. 2006):

[1] whether the protected design represents the best design; [2] whether alternative designs would adversely affect the utility of the specified article; [3] whether there are any concomitant utility patents; [4] whether the advertising touts particular features of the design as having specific utility; [5] and whether there are any elements in the design or an overall appearance clearly not dictated by function.

Id. at 1366. OLI argues factors 1-3 and 5 tip in its favor. Although the Court has already embarked on claim construction and thus sorted out the functional from the ornamental, it will address OLI’s points in turn.

Factor One. First, OLI argues “[t]he D930 Patent not only represents the best design for the product, it represents the only design for the product because the shape, stroke and size of the characters are dictated by statute.” It points only to the NHTSA guidelines in its initial brief as

evidence supporting this contention. (*See* D930 Case, Def.’s Br. in Supp. of Mot. for Summ. J. 13.) As discussed above, the NHTSA guidelines are not required by law and thus do not support this claim.

To correct for this, OLI then points to three state statutes or regulations in its reply brief (*See* D930 Case, Def.’s Reply 17-18.) Notably, a reply is not the proper time to raise new arguments or submit new evidence, and OLI does not provide an argument as to why this Court should allow it in this instance. *See Scottsdale Ins. Co. v. Flowers*, 513 F.3d 546, 553 (6th Cir. 2008). Regardless, the evidence is not persuasive. Oregon’s regulations require capital letters and provide minimum and maximum dimensions. *See* Or. Dept. of Educ., Rule 581-053-0240(35); Indiana’s require “School Bus” in black lettering against “school bus yellow” background and further specify the lettering must “conform to Series ‘B’” of the standard alphabets for highway signs.” 575 Ind. Admin. Code 1-9-16(m), (p); Michigan’s statute requires that buses be “chrome yellow” with “school bus” in black lettering no less than eight inches in height. Mich. Comp. Laws § 257.1833.

OLI has successfully pointed out that there are some applicable statutes and regulations that dictate some aspects of the D930 patent. But unanswered questions remain. Are Oregon, Michigan, and Indiana the only states in which either SMG or OLI operate? Indiana requires “Series B” lettering, do Oregon and Michigan? Does the D930 patent use Series B lettering? Does the accused product? In short, it is not enough for OLI, on a motion for summary judgment for an affirmative defense which requires clear and convincing evidence, to put some statutes on the table and conclude, without demonstrating, the “font, height, shape and stroke of the indicia[] are all required by law.” Even if it were sufficient, this Court has already concluded that the phrase “School Bus” is not covered by the D930 patent. But OLI offers no evidence that the other parts

of the design are themselves dictated by statute or function, or otherwise represent the best design. Thus, OLI has failed to prove factor one tips in its favor.

Factor Two. OLI argues that SMG “testified that the design is the only way to attach the sign to a school bus without creating a hole or cavity for a grommated lens[,]” and thus, alternative designs would adversely affect the utility (factor two). (*See* D930 Case, Def.’s Br. in Supp. of Mot. for Summ. J. 14 (citing D930 Case, Ex. M to Def.’s Br. in Supp. of Mot. For Summ. J, ECF No. 53-4).) This too falls short of Defendant’s burden. Again, OLI focuses on one aspect of the D930 design (here, how the design facilitates attachment) to the exclusion of all others. As SMG counters, for instance, “the shape of the sign need not be rectangular, need not have rounded corners, and need not feature any border surrounding the text.” (D930 Case, Pl.’s Br. in Opp’n to Def.’s Mot. for Summ. J. 9.) OLI homes in on a single aspect of the design and does not address how alternative designs for the *other* aspects would adversely affect utility. OLI has failed to prove factor two tips in its favor.

Factor Three. OLI argues that the existence of a related utility patent, the 491 Patent, suggests that the D930 patent is entirely functional. Further, it contends that the 491 Patent claims are identical to those in the D930 Patent.

This factor is a closer call than the previous factors. For one, there appears to be little case law expounding on this factor. *PHG* asks “whether there are any concomitant utility patents,” and the literal answer to that question is yes. The 491 Patent can be fairly called a concomitant utility patent. If that is all there is to the factor, then it tips in favor of OLI. But this factor should be put in the proper context of the Court’s task—to determine whether a design is completely functional.

OLI argues that the 491 Patent covers “the exact same design” as the D930 Patent, but points only to a single embodiment of the 491 Patent as proof of this. (D930 Case, Def.’s Br. in

Supp. of Mot. for Summ. J. 14.) But that single embodiment of the 491 Patent is not the sum total of that patent. *See Phillips*, 415 F.3d at 1323. The 491 Patent is plainly more concerned with the *functioning* of the illuminated bus sign, including numerous claims for the internal structure of the sign, for the mounting of the sign to vehicles, and for the use of specific component parts. (*See* 491 Patent.)

The primary aspect of the 491 Patent that overlaps with the D930 Patent is the portion of independent claim 1 specifying “an illuminated school bus sign” and dependent claim 10 “wherein the lettering spells the words SCHOOL BUS.” (*See id.*, 22:52, 24:5-6). No other claims in the 491 Patent go towards ornamental design, unlike the D930 patent. There is no discussion of the design of the lettering, the black border, the spacing between the lettering and the black border, the general shape, etc. Although some of the figures of the 491 Patent depict these features, a utility patent is emphatically not limited to the illustrated embodiments. This is a key distinction between utility patents and design patents. *Compare Phillips*, 415 F.3d at 1323 *with Lanard Toys*, 958 F.3d at 1341-32.

In short, the D930 Patent primarily covers the ornamental aspects of the illuminated sign while the 491 Patent covers its functional aspects. In the broader context of sorting function from ornament, courts have stressed “[t]he function of the article itself must not be confused with ‘functionality’ of the design of the article.” *See High Point Design*, 730 F.3d at 1316 (quoting *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993)). Still, the fact that a utility patent exists does fit the text of the *PHG* factors. Thus, for purposes of this summary judgment motion, the Court will view this factor as weighing in neither party’s favor.

Factor Four. OLI does not address this factor; therefore, the Court will construe it in favor of SMG on summary judgment.

Factor Five. Finally, OLI argues that “each and every aspect claimed in the D930 Patent is either dictated by function or by statute.” The Court discussed this issue in its claim construction analysis above, but it bears repeating here. To reiterate, OLI points to two pieces of evidence. First, it references the deposition transcript of Kevin Smith where he acknowledged a “product . . . needs to be both . . . functional . . . and . . . aesthetic.” Second, OLI again points to statutory requirements. (D930 Case, Def.’s Br. in Supp. of Mot. for Summ. J. 16.) The first point amounts to an acknowledgment that patents comprise both functional and utilitarian considerations and does not help OLI’s case. The second point is a repeat of its *Factor One* claim which this Court rejects. OLI has failed to prove factor five tips in its favor.

OLI has not pointed to a single *PHG* factor that tips conclusively in its favor. At this summary judgment stage, it simply has not met its burden to produce by clear and convincing evidence that the patent is invalid due to functionality.

(b) Obviousness

OLI argues that the D930 patent is invalid because it is obvious in light of prior art. To assess obviousness,

a finder of fact employs two distinct steps: first, ‘one must find a single reference, a something in existence, the design characteristics of which are basically the same as the claimed design; second, once this primary reference is found, other references may be used to modify it to create a design that has the same overall visual appearance as the claimed design.

High Point Design, 730 F.3d at 1311 (internal quotations omitted). The ultimate inquiry is “whether the claimed design would have been obvious to a designer of ordinary skill who designs articles of the type involved.” *Id.* Note, the ordinary designer is distinct from the ordinary observer used to determine infringement. *Id.* at 1313.

Before the Court can begin its analysis, it must first address evidentiary issues raised by SMG. Central to an obviousness-based invalidity defense is prior art. An inventor is entitled to a

patent unless “the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.” 35 U.S.C. § 102(a); *see also id.* § 171(b). OLI has produced four pieces of purported prior art: U.S. Patent No. D913,177 S (“D177 Patent”) (D930 Case, ECF No. 63-1); U.S. Patent No. D712,968 S (“D968 Patent”) (D930 Case, ECF No. 64-1); U.S. Patent No. D516,125 S (“D125 Patent”) (D930 Case, ECF No. 65-1); and its own lighted sign which it purchased from a manufacturer, depicted by a photograph and a still image from a YouTube video (D930 Case, ECF Nos. 66-1, 67-1). It withdrew a fifth piece of art, a technical drawing from a school bus manufacturer, following SMG’s motion for partial summary judgment. (D930 case, Def.’s Resp. to Pl.’s Mot. Partial Summ. J. 1.)

SMG challenges the D177 Patent and OLI’s own lighted sign as failing to qualify as admissible prior art. Curiously, SMG has filed a motion for partial summary judgment to disqualify this purported evidence. But evidentiary matters are not resolved on a motion for summary judgment. *See Louzon v. Ford Motor Co.*, 718 F.3d 556, 561 (6th Cir. 2013) (quoting *Luce v. United States*, 469 U.S. 38, 40 n.2 (1984)). It points to no authority authorizing the Court to do so, and thus the Court declines.

Nevertheless, a motion for summary judgment must be made on evidence that will ultimately be admissible at trial in some form. *Celotex Corp v. Catrett*, 477 U.S. 317, 324 (1986). Thus, the Court will consider SMG’s objections to OLI’s prior art references in the context of OLI’s motion for summary judgment, without making a final ruling on any reference’s ultimate admissibility. Any factual disputes surrounding an individual piece of evidence will be viewed in the light most favorable to SMG.

D177 Patent. SMG argues that the D177 Patent cannot qualify as prior art because it has a later priority date and is not directed to the same article of manufacture as the D930 Patent. If true, SMG is correct that OLI would be precluded from submitting the D177 Patent as a prior art reference. *See* 35 U.S.C. § 102(d) (on priority dates); *In re SurgiSil, L.L.P.*, 14 F.4th 1380 (Fed. Cir. 2021) (on article of manufacture). OLI argues that the D177 Patent's priority date is the initial application date of December 10, 2015, of which the D177 Patent is a continuation-in-part. SMG counters that the D177 Patent cannot claim the earlier continuation-in-part priority date because the final, issued patent covered additional material. Both point to the patent history, which shows the 2015 patent application's inclusion of one view of what would eventually be covered by the D177 Patent. (*See* D930 Case, D177 Patent History, ECF No. 81-7, PageID.1901.) OLI does not meet the charge that D177 is directed towards a different article of manufacture as the D930 Patent.

Viewing this in the light most favorable to the non-movant, SMG, the Court finds that a genuine dispute of material fact exists as to the qualification of the D177 Patent as prior art. Namely, whether the earlier patent application's inclusion of the design embodied in D177 was inconsequential and incomplete, and whether D177 and D930 are directed towards the same article of manufacture. Thus, the prior art will be excluded from the obviousness analysis for purposes of this opinion.

OLI's Own Lighted Sign. OLI has offered images of its own lighted sign on display at a trade show (D930 Case, ECF No. 67-1) and a still from a YouTube video purporting to show its sign installed on a school bus (D930 Case, ECF No. 66-1) as prior art. SMG challenges that evidence as inadmissible on authentication grounds. After SMG raised this challenge, OLI offered, for the first time, an unsigned affidavit of its sales manager, David Lantzy, verifying that the photo depicts a sign that he displayed at trade shows from July 2016 to 2018, and a sales invoice

from the manufacturer of the sign from 2015. (*See* D930 case, ECF No. 82, PageID.1955-1959, 1959-1961.) Note, Lantzy did eventually sign the affidavit, which was offered as evidence in the 491 case, after the time for briefing in this case had passed. (*See* 491 Case, Lantzy Aff., ECF No. 32-4.) OLI also claimed, again seemingly for the first time, that the photograph and YouTube stills were not themselves prior art references, but rather depictions of the sign purchased from the manufacturer in 2015. That sign purchased from the manufacturer is the purported prior art reference.

A reply brief is not the proper time to raise new evidence. *Scottsdale Ins. Co.*, 513 F.3d at 553. Without deciding on the ultimate admissibility of this prior art, the Court finds that OLI has asserted new evidence and recharacterized old evidence too late in the process to credit. The YouTube still and photograph, as timely submitted, are too indefinite and lack authentication, as SMG argues in its response. But even if the Court were to credit the late affidavit as authenticating these pieces of evidence relating to the prior art reference, the reference itself leaves too many questions to resolve at this stage. The photograph of the prior art lacks the detail required to evaluate a design infringement claim. The YouTube still depicts the prior art mounted, whereas the design patent depicts an unmounted sign. And the Court has no information relating to the trade show so as to decide the extent of the reference's public use. For all of these reasons, the prior art will be excluded from the obviousness analysis for purposes of this Opinion.

In summary, OLI is left with two pieces of prior art at this summary judgment stage: the D968 patent and the D125 patent. The Court now turns to the application of the two-step test for invalidity based on obviousness.

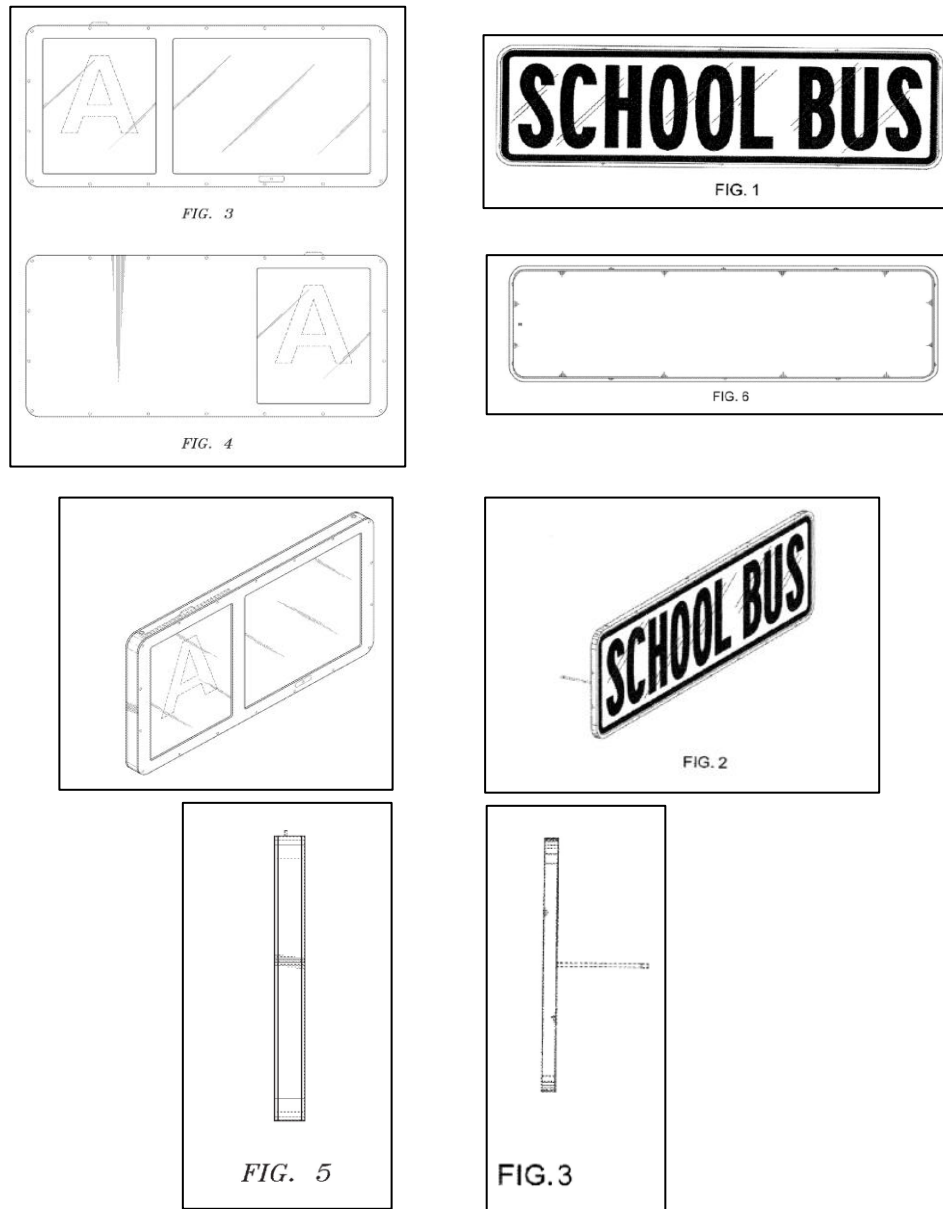
Step One. To reiterate, the first step is to find a single reference which features “basically the same” design characteristics as the claimed design. *See High Point Design*, 730 F.3d at 1311.

This first step involves both (1) discerning the correct visual impression by the patented design as a whole and (2) determining whether there is a single reference that creates “basically the same” visual impression. *Id.* at 1312 (citing *Durling v. Spectrum Furniture Co.*, 101 F.3d 100, 103 (Fed. Cir. 1996)). The Court must provide sufficient reasoning for both, including a translation of the patented design to a verbal description. *Id.* at 1314. The Federal Circuit has cautioned against translating a design patent “too broadly,” and has required a focus “on visual appearances rather than design concepts.” *Durling*, 101 F.3d at 104.

Step One, Part One—Verbal Description of D930. The D930 patent creates a visual appearance of a rectangular sign, elongated horizontally. It features opaque, large lettering, prominently placed, and a surrounding black border spaced minimally apart. The letters are placed over or under a transparent panel. The horizontal and vertical dimensions of the sign are driven primarily by the letters displayed, sufficiently sized to fit a word or phrase up to roughly 12 characters. The sign is further surrounded by a frame, visually distinct from the lettering and the black border. The sign features curved corners. When viewed from the side and top, the sign is relatively thin. When viewed from the back, the sign is relatively featureless. It appears flat and opaque and lacks both the lettering and the black border of the front.

Step One, Part Two—The Single Reference. While OLI dutifully recounts its burden to point to a single reference which has the same design characteristics as the claimed design, it fails to actually do so. Pointing to a single reference is crucial. The analytical steps are clear. First, a single, primary reference is identified. Then, other references may be asserted that modify the design of the primary reference “to create a design that has the same overall visual appearance as the claimed design.” *High Point Design*, 730 F.3d 1301. This analytical process describes evaluating the evolution of a design if a single design is not itself enough to establish obviousness.

Looking at the remaining prior art references, OLI appears to elevate D968 as the most on-point design. (See D930 Case, Def.'s Br. in Supp. of Mot. for Summ. J. 18 (“[I]n particular . . . the D968 Paten[t] ha[s] virtually the same overall visual appearance as the D930 Patent.”).) Thus, for purposes of this summary judgment motion, the Court will consider this design as OLI’s offered primary reference. The most relevant depictions are reproduced here, side-by-side with the relevant views of the D930 patent:



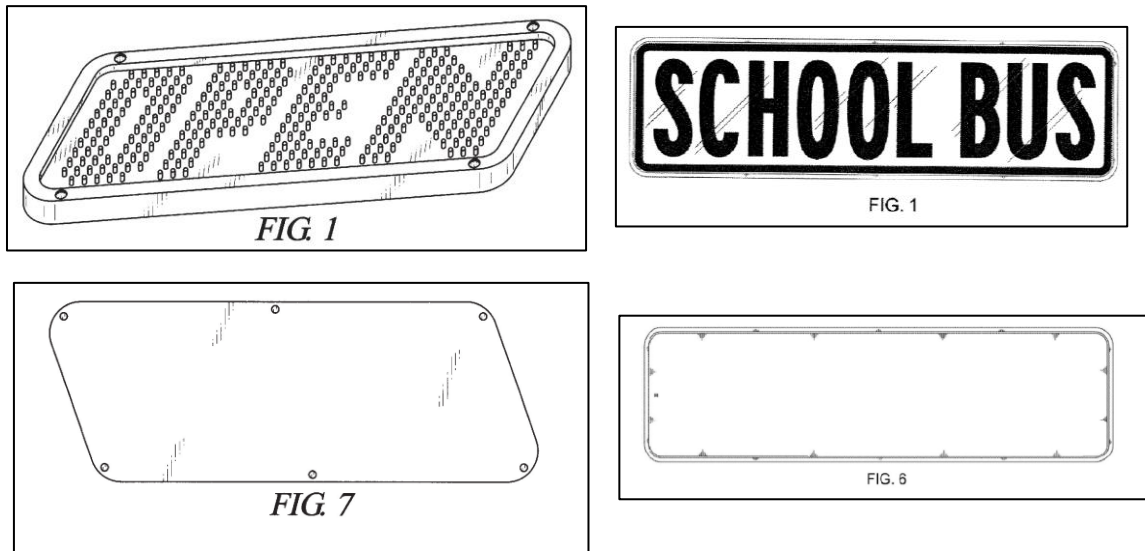
(D930 Case, D968 Patent, ECF No. 64-1.)

The D968 patent creates a visual appearance of a rectangular sign, elongated horizontally. It features two separate spaces for lettering, vertically bisecting the sign roughly one-third of the way from the left side. The smaller space created by this bisection is relatively more square-shaped while the larger is more rectangular. The lettering appears to be placed over or under a transparent panel, which is recessed from the surrounding frame. The sign is surrounded by a frame, visually distinct from the lettering and transparent panels. The sign features curved corners. When viewed from the side and top, the sign is relatively thin. When viewed from the back, the rear side of the lettering in the smaller panel is visible. The smaller panel is also recessed from the surrounding frame. The rear side of the larger panel is not visible and instead appears opaque and flush with the frame.

Compare this discussion of the visual appearance of the D968 patent to the discussion of the visual appearance of the D930 appearance and it is clear that the two do not share “basically the same” design characteristics. Even a layperson can appreciate major overall differences with the D968 patent, particularly that of a bisected sign where one panel is visible from both sides. But the test doesn’t reference the ordinary person, it references the ordinary designer. Thus, a designer presumably would be tuned into even more subtle differences. This is an appropriate inference to draw given the procedural posture.

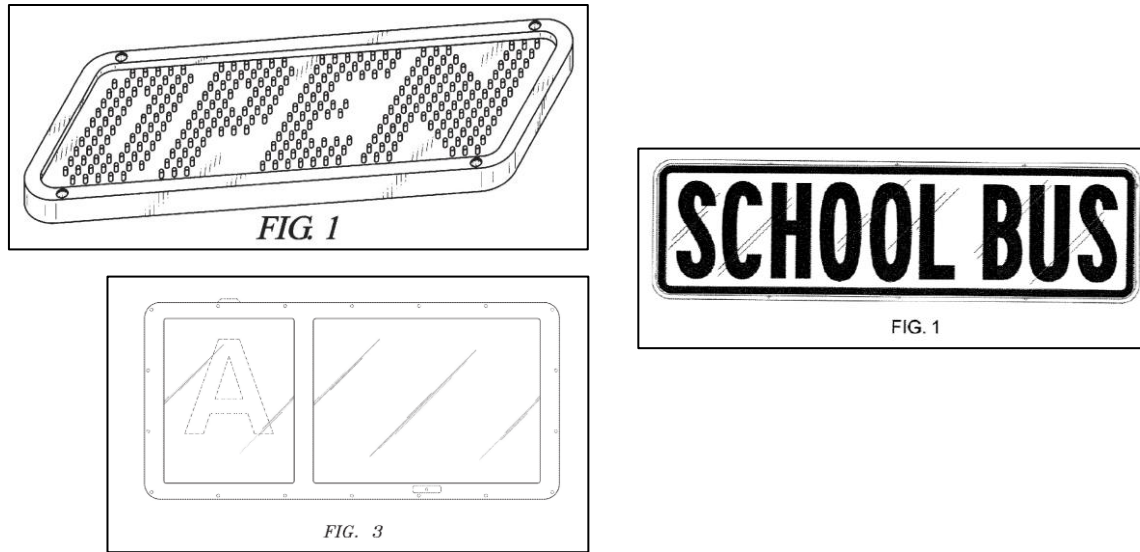
Step Two—Additional References. Even though OLI fails to point to a single reference that is “basically the same,” it does include an additional reference, the D125 Patent. The Court will consider this additional reference for purposes of this summary judgment motion. Critically, OLI has not attempted to show how this additional prior art reference combines with its primary single reference to create a design that is substantially the same. This Court will not embark on a detailed

analysis of the secondary reference, but will reproduce it here side-by-side with D930 for comparison purposes and provide a brief verbal description:



(D930 Case, D125 Patent, ECF No. 65).

The visual differences between D125 and D930 are readily apparent. D125 is slanted, creating a parallelogram rather than a rectangle. It features indicia made up of individual lighted components rather than solid, opaque lettering. There is no black border. The panel is not claimed to be transparent. It is, overall, a different design in the eyes of the ordinary designer. Furthermore, OLI has failed to explain, and this Court fails to understand, how D125 combines with D968 to create a design substantially the same as D930. Relevant pictures from each are reproduced below (with D930 on the right):



Simply put, OLI has not carried its burden at this summary judgment stage. It has failed to adduce sufficient clear and convincing evidence that would preclude a reasonable jury from finding for SMG on the issue of invalidity based on obviousness.

(c) Indefiniteness

OLI includes an indefiniteness section in its brief, but merely quotes from an uncited source. (D930 Case, Def.'s Br. in Supp. of Mot. for Summ. J. 18-19.) There is neither argument nor evidence. To the extent OLI makes this indefiniteness argument, the Court rejects it.

To summarize, OLI has not carried its burden on any one of its invalidity arguments. Genuine disputes of material fact remain. This Court will deny OLI's motion for summary judgment. This Court will also deny SMG's motion for summary judgment to exclude the prior art references, reserving resolution of the evidentiary questions raised for an appropriate evidentiary proceeding.

B. Cross Motions on the 491 Patent

Before the Court are several motions related to the 491 Patent. OLI filed a motion requesting claim construction of ambiguous claim terms. SMG and OLI filed cross motions on

the issues of infringement and OLI's patent invalidity defense. To reiterate, the 491 Patent is a utility patent.

1. Defendant's Motion for Claim Construction

The parties dispute several terms throughout their summary judgment briefing as well as their claim construction briefing. The terms, with their disputed meanings, are summarized as follows:

Claim Term (OLI's assertion of ambiguity in bold)	Plaintiff SMG's Construction	Defendant OLI's Construction
"a frame "	Ordinary meaning <i>or</i> Structure having substantially any configuration suitable for providing structure and support	A component distinct and separate from an illuminated sign, which may include a single part or a plurality of parts, which may be provided together with the illuminated sign, and which may be used for supporting and indirectly mounting the illuminated sign to a surface
"for direct mounting on a school bus"	Ordinary meaning	"This is a statement of intended use and not a required limitation of the claimed invention since it is in the claim preamble, rather than being recited as a claim feature. It means that the illuminated sign is capable of being mounted to a school bus without a frame."
"the translucent panel is spaced by a spacer from the LEDs thereby creating a gap between LEDs and the translucent panel"	Ordinary meaning <i>or</i> A structure that creates or maintains space	A separate component or layer of the illuminated sign disposed between the LEDs and a translucent panel to create a gap between the LEDs and the translucent panel
"The spacer surrounds the LEDs"	Ordinary meaning	The spacer extends entirely around the LEDs
" The spacer . . . supports a rear surface of the translucent panel along the entire perimeter of the translucent panel"	Ordinary meaning	The spacer bears all or part of the weight of the rear surface of the translucent panel

“weather-tight seal”	Ordinary meaning	A silicone seal which encloses the outer peripheral edge of the entire illuminated sign including all layers from a translucent cover to an opaque rear panel of the illuminated sign
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(a) Legal Background

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips*, 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). A court resolves, as a matter of law, disputes that arise as to a claim term’s meaning and scope. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995). The goal of claim construction is to interpret claims from the perspective of “a person of ordinary skill in the art,” rather than a layperson. *Phillips*, 415 F.3d at 1313. This inquiry “provides an objective baseline from which to begin claim interpretation.” *Id.*

The Federal Circuit has provided a hierarchy of evidence to consider, beginning with the claim itself and ending with extrinsic evidence and canons of construction. “[T]he sequence of steps used by the judge in consulting various sources is not important; what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law.” *Id.* at 1324. For ease of analysis, this Court will discuss its approach to the evidentiary hierarchy in steps.

The first step in claim construction is to determine whether the ordinary meaning of claim language as understood by a person of ordinary skill in the art is “readily apparent.” If so, further elaboration is likely unnecessary. *See id.* at 1314 (quoting *Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001)). Indeed, “district courts are not (and should not be) required to construe *every*

limitation in a patent’s asserted claims.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) (emphasis in original). “However, in many cases, the meaning of a claim term as understood by persons of skill in the art is not readily apparent.” *Id.*

The second step in claim construction, if necessary, is to examine the claims as part of a “fully integrated written instrument” by looking at the patent’s “intrinsic evidence.” *Phillips* 415 F.3d at 1315. This intrinsic evidence consists of everything included in the patent itself, such as the claims at issue, the specifications, and other claims, as well as the prosecution history. The specification in particular “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Id.* (internal quotations omitted).

The third step in claim construction, if ambiguities remain, is to resort to extrinsic evidence. This includes “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Id.* at 1317. Note that this extrinsic evidence must still be considered in the context of the intrinsic evidence; it does not stand alone. *Id.* at 1319.

Finally, if ambiguity persists up to this point, a court may employ various doctrines to resolve the dispute. One such doctrine, argued by OLI here, is to construe claims to sustain their validity. The Federal Circuit has cautioned that this doctrine is “of limited utility” and is not a regular component of claim construction. *Id.* at 1327-28.

(b) Disputed Terms Related to “Frame”

The disputes surrounding “frame” and “direct mounting” boil down to a single issue—whether the frame is necessarily a distinct component, separate from the remainder of the sign. First, the Court notes that the term “frame” itself is easily understood. This term should be afforded

its ordinary meaning, read in conjunction with the remaining limitations contained in the claim (*i.e.*, a “frame . . . for mounting[,]” (*see* 491 Patent 22:62-63)).

Affording frame its ordinary meaning does not resolve the primary issue raised by the parties. The next step is to view the term in the context of the patent as a fully integrated written document. In other words, the Court must construe the relevant terms with reference to the intrinsic evidence.

Looking at just the language of the claim itself, SMG argues that the “proposed construction that the ‘frame’ is ‘distinct and separate’ from the illuminated sign is *directly contrary to the language of claim 1.*” (491 Case, Pl.’s Reply to Mot. for Claim Construction 10, ECF No. 54) (emphasis in original).) SMG focuses on the word “comprising” in the preamble to claim 1 such that everything that follows indicates a single invention.

The problem for SMG is that “comprising” does not conclusively decide whether the claimed invention is a singular article or whether it is made up of distinct, component parts. Indeed, courts often grapple with enumerating the components of a given patent claim to afford the claim its proper scope. *See, e.g., Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 653 F.3d 1296, 1304-05 (Fed. Cir. 2011) (construing a syringe “body” to be limited to a one-piece structure, rather than a two-piece structure, in light of the specifications where the text of the claim itself was open to either construction). In fact, “comprising” itself is well-established as an “open transition phrase” that allows coverage of technologies beyond the recited elements of a claim. *See AFG Indus., Inc. v. Cardinals IG Co.*, 239 F.3d 1239, 1245 (Fed. Cir. 2001). It should not be viewed as limiting or requiring a single, fully integrated invention.

“Frame,” as used in the claim, can thus support two meanings—(1) an integral and necessary component of the illuminated sign which provides support and/or structure, or (2) a

separate component unnecessary to the functioning of the separate illuminated sign. The plain and ordinary meaning of frame does not favor either construction. As a result, resort to the rest of the patent document is necessary, and the specifications take on primary importance. *See Phillips*, 415 F.3d at 1315 (“Usually, [the specification] is dispositive; it is the single best guide to the meaning of a disputed term.”).

Evaluating the specifications to determine a claim’s disputed meaning involves a well-known and well-trod “tightrope.” *Anderson Corp. v. Fiber Composites, LLC*, 474 F.3d 1361 (Fed. Cir. 2007). There is a fine “distinction between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim.” *Phillips*, 415 F.3d at 1323. The former is appropriate, the latter is not.

The Federal Circuit, in some cases, has stressed that “[t]he patentee is free to choose a broad term and expect to obtain the full scope of its plain and ordinary meaning unless the patentee explicitly redefines the term or disavows its full scope.” *Thorner v. Sony Computer Ent. Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012). The standard for redefining a term or disavowing the full scope has been described as “exacting.” The disclaimer must be “clear and unmistakable[.]” *Id.* at 1366-67. The court has found no disavowal even where the patentee criticizes a certain embodiment or where “the only, or all of the embodiments, contain a particular limitation.” *Id.*

But the Federal Circuit has also found that “even when guidance is not provided in explicit definition format, the specification may define claim terms by *implication* such that the meaning may be found in or ascertained by a reading of the patent documents.” *In re Abbott Diabetes Care Inc.*, 696 F.3d 1142, 1150 (Fed. Cir. 2012) (internal quotations omitted) (emphasis added). So, “while the claims leave open the possibility” of one or more constructions, the Court should choose

the construction that “tether[s] the claims to what the specifications indicate the inventor actually invented.” *Retractable Techs.*, 653 F.3d at 1305.

Thorner itself recognized the possibility of disclaimer by implication. “[T]he ‘implied’ redefinition must be so clear that it equates to an explicit one. In other words, a person of ordinary skill in the art would have to read the specification and conclude that the applicant has clearly disavowed the claim scope or has acted as its own lexicographer.” *Thorner*, 669 F.3d at 1362. What these lines of cases do agree on is that “[i]t is axiomatic that the claim construction process entails more than viewing the claim language in isolation. Claim language must always be read in view of the written description.” *Retractable Techs.*, 653 F.3d at 1305.

Still, the Federal Circuit cases in the intervening years since *Phillips* appear to point in conflicting directions. See Federal Judicial Center, *Patent Case Management Guide* § 5:59 (3d ed. 2016). The best way to avoid adhering too closely to one interpretation over the other, then, is to hew to the language of *Phillips* itself:

To avoid importing limitations from the specification into the claims, it is important to keep in mind that the purposes of the specification are to teach and enable those of skill in the art to make and use the invention and to provide a best mode for doing so One of the best ways to teach a person of ordinary skill in the art how to make and use the invention is to provide an example of how to practice the invention in a particular case. Much of the time, upon reading the specification in that context, it will become clear whether the patentee is setting out specific examples of the invention to accomplish those goals, or whether the patentee instead intends for the claims and the embodiments in the specification to be strictly coextensive.

Phillips, 415 F.3d at 1323.

“Upon reading the specification in that context,” it becomes clear that the 491 Patent sets out an illuminated sign with a separate, distinct mounting frame (or, a “frame . . . for mounting” in the language of the claim, (491 Patent 23:63-64)). The 491 Patent repeatedly and exclusively refers to a “separate mounting frame,” as distinct from the sign, throughout the specifications (for

a relatively small collection of these references, *see, e.g.*, 491 Patent 2:5-9, 47-48; 4:46-48; 6:12-15; 7:42-51; 10:57; 11:41-45). For example, the 491 Patent describes one embodiment as “a self-contained illuminated sign . . . which is usable together with a separate mounting frame” (*see id.* at 2:5-9), and another where “[t]he overall sign construction . . . is frameless” and that “[t]o support the frameless sign . . . , a separate mounting frame is thus provided” (*see id.* at 7:42-51). The patent describes a number of potential embodiments for the frame itself, including some where the frame is a single piece (*see id.* at 14:65), and some where it is comprised of multiple pieces (*see id.* at 9:32-35).

The 491 Patent extols the virtues of its separate mounting frame, noting “[s]ince the sign is mounted indirectly to the bus via the mounting frame, service or replacement of the sign can be performed without having to remove the entire installation.” (*Id.* at 11:11-13.) While the 491 Patent notes that “[w]hat has been described is merely illustrative of some embodiments of the present disclosure[,]” it also sets out to identify “[o]ther embodiments [that] are possible and will now be described.” (*Id.* at 12:1-3.) Those other possible embodiments include a camera which may be included in the sign or “[a]lternatively . . . may be mounted in the upper corner of the frame of the sign.” (*Id.* at 12:11-18.) They also include a “sensor” which “could be located anywhere practical on the outside of the frame or sign assembly.” (*Id.* at 12:37-39.)

The 491 Patent goes on, never once indicating that the mounting frame is anything other than a separate, distinct component. SMG’s attempts to say otherwise are unconvincing. In fact, SMG’s arguments hurt its case, not help it. At one point, SMG notes “the specification describes signs both with and without frames. It discloses a ‘frameless sign’ that may be framed to make a ‘framed’ sign.” (491 Case, Pl.’s Reply in Supp. of Mot. for Summ. J. 4.) In other words, the sign may, but does not have to be, framed, which suggests that the frame is a separate component.

SMG also points to a figure that depicts the sign as installed on a bus with “frame material.” Figure 23 of Patent 491, to which SMG refers, depicts a sign assembly without a “mounting frame” that is installed in a “bus chamber.” (*See id.* at 14:6-9.) If the mounting frame was an integral component of the sign, it would be depicted along with the illuminated sign installed in the bus chamber. But the sign is, as explained throughout the patent, “self-contained” and separate from the mounting frame.

SMG’s other examples support this interpretation. SMG confirms that the “sign” as described in the patent is capable of being mounted *either* via the mounting frame *or* via other methods (*e.g.*, a “mounting bracket,” *id.* at 14:58). This necessarily excludes the frame as an integral component to the sign itself. In other words, the sign can exist, and indeed is designed to exist, separate from the mounting frame. The patent does not describe an invention requiring the mounting frame to provide “structure” to the sign. Instead, it describes a sign that has its own, self-contained structure, and merely needs a way to be mounted onto a vehicle. The separate mounting frame provides one way to do that.

The closest the patent comes to describing the frame as integral to the sign is where it notes “[i]n some embodiments, the frame may be a single piece frame whereby the sign is enclosed by means of intentional deformation of the frame (crimping, stamping, pressing, etc.).” (*Id.* at 15-6-9.) Although SMG does not explicitly make this argument, this statement could be seen as indicating that the frame is more permanently affixed to the rest of the sign. But this weakens the claimed benefit of the separate mounting frame structure by presumably making it more difficult to remove the sign assembly from the mount. At any rate, even this specification describes the sign as separate from the frame. The frame, while now permanently attached to the sign, is still unnecessary to give structure and function, other than mounting, to the sign itself.

Unlike the specifications, the patent prosecution history does not help elucidate the claim language. It appears that, initially, “frame” was modified by “single-piece.” But how the frame itself is constructed does not bear on whether the frame is an integral part of the illuminated sign or whether it remains a distinct component.

The only other intrinsic evidence to consider are the other claims. The only dependent claim that mentions frame is dependent claim 8, which notes that the frame is a “single piece.” (*See* 491 Patent 24:1.) As with the prosecution history, this evidence does not help elucidate the claim language.

Using *Phillips* as a lodestar and examining the intrinsic evidence in the context of a person ordinarily skilled in the art, this Court finds that the invention claims the frame as a separate, distinct component. This is in large part due to the repeated, consistent, and exclusive description of the frame as separate and distinct in the patent specifications. Thus, resort to extrinsic evidence and the canon to preserve patent validity are unnecessary.

Importantly, the Court is not departing from the ordinary and plain meaning of “frame” or redefining it. Rather, it is giving content to a term that can only be tethered to its invention by reference to the specifications, as a person ordinarily skilled in the art would do. This Court views *Retractable Technologies* as more instructive than *Thorner*. Like *Retractable Technologies*, the 491 Patent touts its separate mounting frame as a *feature* of its invention. *See Retractable Techs.*, 653 F.3d at 1305. Like *Retractable Technologies*, the specifications expressly state that the frame is a separate piece from the self-contained sign. *See id.* Like *Retractable Technologies*, each figure depicts a sign with a separate mounting frame. *See id.* And like *Retractable Technologies*, the specifications do not disclose a frame that is integral to the sign and provides both structure and support to the self-contained sign. *See id.* Thus, “while the claims leave open the possibility”

that frame may encompass an integral component or a distinct one, “the specifications tell us otherwise.” *Id.* Indeed, the disclaimer in the 491 Patent is much stronger than the supposed disclaimer in *Thorner* where the patentee “simply refer[ed] to two terms as alternatives or disclos[ed] embodiments that all use the term the same way.”

It bears emphasizing that “this court may reach a narrower construction, limited to the embodiment(s) disclosed in the specification, when the claims themselves, the specification, or the prosecution history clearly indicate that the invention encompasses no more than that confined structure or method.” *Abbott Lab’ys v. Sandoz, Inc.*, 566 F.3d 1282, 1287 (Fed. Cir. 2009) (internal quotations omitted). That is especially true where a patent “repeatedly, consistently, and exclusively” depicts a given invention as embodying only one of multiple potential interpretations of claim language. *See In re Abbott*, 696 F.3d at 1150; *see also Phillips*, 415 F.3d at 1328-29 (Lourie, J., concurring in part and dissenting in part) (“[C]laims need not necessarily be limited to specific or preferred embodiments in the specification, although they are limited to what is contained in the overall disclosure of the specification.”). The 491 Patent does so here.

(c) Disputed Terms Related to “Spacer”

OLI seeks to construe the claim related to “the spacer [that] surrounds the LEDs and supports a rear surface of the translucent panel” (491 Patent 23:1-3), to mean a “separate component or layer of the sign positioned between the LEDs and the translucent panel that extends entirely around the LEDs and bears all or part of the weight of the rear surface of the translucent panel.” The Court fails to see how OLI’s construction is meaningfully different from the claim itself or is helpful to a fact finder. Rather, this appears to be an exercise in redundancy, creating a definition that is more confusing than the claim itself.

None of the terms that OLI seeks to construe are ambiguous on their face, nor does OLI explain how the claims in light of the specification create ambiguity. Rather, it cites the single

discussion of spacer in the patent as evidence that SMG “clearly indicated its intention to restrict the scope of the claims to the [relevant] embodiment.” (Def.’s Mot. for Claim Construction 25, ECF No. 47.) But the Federal Circuit has “expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” *Phillips*, 415 F.3d at 1323.

Patent 491 contains numerous embodiments. OLI needs more than a brief discussion of a single one to import a more specific (and arguably more confusing) construction of a claim. “A patentee may claim an invention broadly and expect enforcement of the full scope of that language absent a clear disavowal or contrary definition in the specification.” *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1357 (Fed. Cir. 2004); *see also Thorner*, 669 F.3d at 1367. The Court finds the comparison to its construction of frame and *Thorner* useful here. The intrinsic evidence provides some evidence of “spacer” being used in the way OLI contends, but it does not rise to the level of a clear disavowal that is apparent with “frame.”

Thus, the Court declines to construe spacer or any related words. These terms should be given their ordinary meaning. As SMG notes, the claim itself provides further structural limitations that the accused product must meet to establish infringement. This is sufficient for a finder of fact to evaluate infringement.

(d) Disputed Terms Related to “Weather-Tight Seal”

OLI provides little intrinsic support for its definition of “weather-tight seal.” It points to a single embodiment contained in the patent which states, “[i]n some embodiments a silicone seal encloses the edge of the sign unit between the layers and prevents dust and moisture from penetrating the unit.” (See 491 Patent 16:36-39.) From here, its expert concludes the term “to have a plain and ordinary meaning of—a silicone seal . . . which encloses” the sign. (See Carrier Report ¶ 55, ECF No. 27-4.)

The Court recognizes the inherent inconsistency of OLI describing a “plain and ordinary meaning” of “weather-tight seal” as encompassing a specific material. To use this specific definition, however, would be to improperly read a limitation from the written description into the claims. While there is sometimes “a fine line between reading a claim in light of the specification, and reading a limitation into the claim from the specification,” *see Phillips*, 415 F.3d at 1323 (internal quotations omitted), this Court finds the line is relatively clear here.

The claim mentions only that the “entire perimeter [of the sign] . . . is sealed in a weather-tight manner by a weather-tight seal.” (491 Patent, 23:4-6.) Here, “weather-tight” has an ordinary meaning that would be understood by a person ordinarily skilled in the art. This is “readily apparent even to lay judges.” *Phillips*, 415 F.3d at 1314. In layman’s terms, weather-tight means something like, but not exclusively, “proof against wind and rain.” *See, e.g., Weathertight, Merriam-Webster.com Dictionary*, <https://www.merriam-webster.com/dictionary/weathertight> (last visited Sept. 27, 2023). Expounding upon the definition would be in exercise in redundancy and would be unhelpful to the jury. A single mention of “silicone” in the specifications does not change that.

Thus, the Court finds that “weather-tight seal” needs no construction and should be afforded its ordinary meaning, as understood by a person ordinarily skilled in the art.

2. Infringement

With the claims properly construed, the Court now turns to the parties’ cross motions for summary judgment on infringement. SMG moves for summary judgment on literal infringement. OLI moves for summary judgment on both literal infringement and infringement under the doctrine of equivalents. While the motions will be discussed together, each will be evaluated on its merits and all reasonable inferences will be drawn against the moving party. *Redbubble*, 989 F.3d at 442.

(a) Literal Infringement

“A claim is literally infringed when the accused device literally embodies each limitation of the claim.” *Kraft Foods, Inc. v. Int’l Trading Co.*, 203 F.3d 1362, 1370 (Fed. Cir. 2000) (citing *Pall Corp v. Micron Separations, Inc.*, 66 F.3d 1211, 1217 (Fed. Cir. 1995)). Literal infringement analysis requires “application of the properly-construed claim to the accused device” and is a question of fact. *Id.* (citing *Voice Techs. Grp., Inc. v. VMC Sys., Inc.*, 164 F.3d 605, 612 (Fed. Cir. 2008)).

The first four limitations of claim 1. SMG asserts OLI’s product literally embodies the first four limitations of claim 1. These limitations are:

1. An illuminated school bus sign for direct mounting on a school bus, the sign comprising:

Opaque letterings positioned on or over a front surface of a translucent panel;

An opaque rear panel situated opposite to the translucent panel in spaced relation therefrom to define a space therebetween;

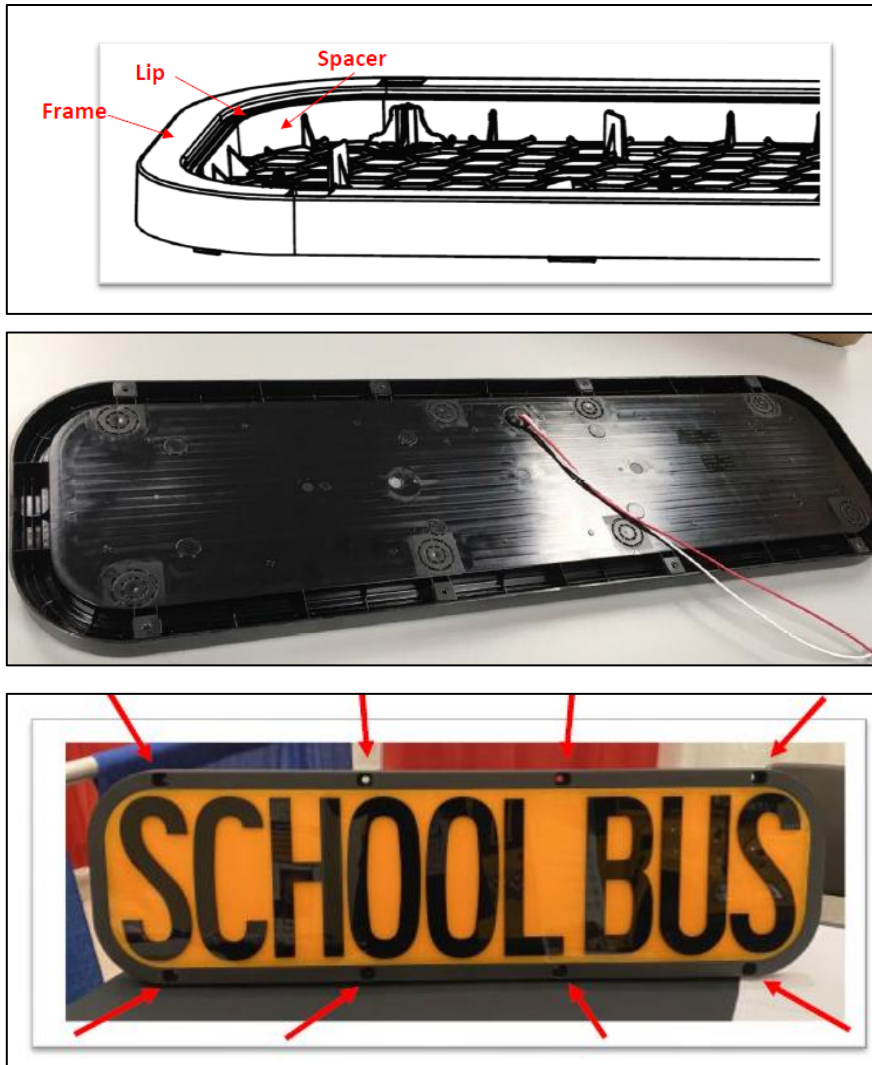
A light source comprising a plurality of LEDs positioned in the space adjacent to the rear panel and pointing towards a front of the sign.

(491 Patent 22:52-61.)

OLI concedes that its product embodies each of these limitations. (See Carrier Report, ¶¶ 69-71.) It cabins its concession to the first of these limitations by arguing it is a preamble that should be “non-limiting for purpose of determining infringement.” (*Id.* ¶ 68). But this neither helps nor hurts OLI’s case. Infringement does not turn on whether the sign is capable of being direct mounted—both the accused product and the invention claim may be direct mounted. No dispute exists on this point, and thus the accused product literally infringes on the first four limitations of the claim.

Frame. The Court’s construction of “frame” as a distinct component separate from the remainder of the sign largely resolves literal infringement on this limitation. There appears to be no dispute that the accused product features a frame that is literally different than the distinct frame of Patent 491.

SMG does not offer an argument in the alternative should OLI’s claim construction prevail. SMG’s argument relies on “frame” being construed as allowing for both a distinct component and an integral component. The evidence it cites shows the accused product as having a frame that is integrally connected to the remainder of the sign (see representative images reproduced below). Indeed, OLI asserts, and SMG does not dispute, its accused product has a “one-piece, tub-shaped, rigid, plastic housing with a bottom panel, an outer peripheral sidewall that extends upward from the bottom panel and a lip/ledge that projects inward from the upper end of the sidewall defining an opening.” (*See* 491 Case, Def.’s Resp. to Pl.’s Mot. for Summ. J. 17.)



(491 Case, York Report ¶¶ 72, 86, ECF No. 27-6.)

The periphery of this structure is what SMG asserts is the accused product's frame because it surrounds the sign and has through-holes for mounting. While this may be a frame in one sense, it is not a frame in the sense of the 491 Patent. The frame is not separate from the remainder of the sign; it is an integral component of the sign which cannot be removed.

The only suggestion of the accused product featuring a frame in the same sense as the 491 Patent is in SMG's expert report. The report states, "The [accused product] further includes a separate mounting frame . . . the mounting frame having a space for removably receiving the sealed sign as a single unit." (*Id.* ¶ 31.) This statement is insufficient to create a dispute of fact

for summary judgment purposes. The expert points to no evidence which suggests the accused product has a “separate mounting frame” and his statement directly contradicts his repeated references to “direct mounting.” It is clear from the images and technical drawings of the accused product, which both parties rely on, that its frame is integral to the sign as a whole and not a separate component.

Based on the foregoing, OLI’s accused product does not literally infringe on the limitation that the sign contain a frame for mounting, properly construed as a separate and distinct component.

Spacer. Claim 1 mentions “spacer” in two instances:

wherein the translucent panel is spaced by a spacer from the LEDs thereby creating a gap between the LEDs and the translucent panel,

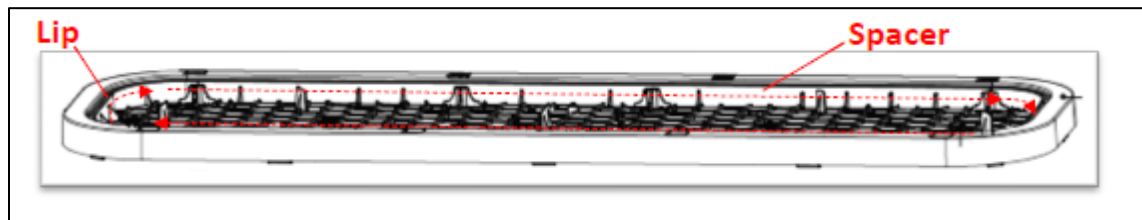
wherein the spacer surrounds the LEDs and supports a rear surface of the translucent panel along the entire perimeter of the translucent panel . . .

(491 Patent 22:65-23:3.) The Court determined that spacer is to be given its plain and ordinary meaning. The parties agree that a spacer is used in the accused product in the sense that something is creating space between the LEDs and the translucent panel. They disagree on what creates that space.

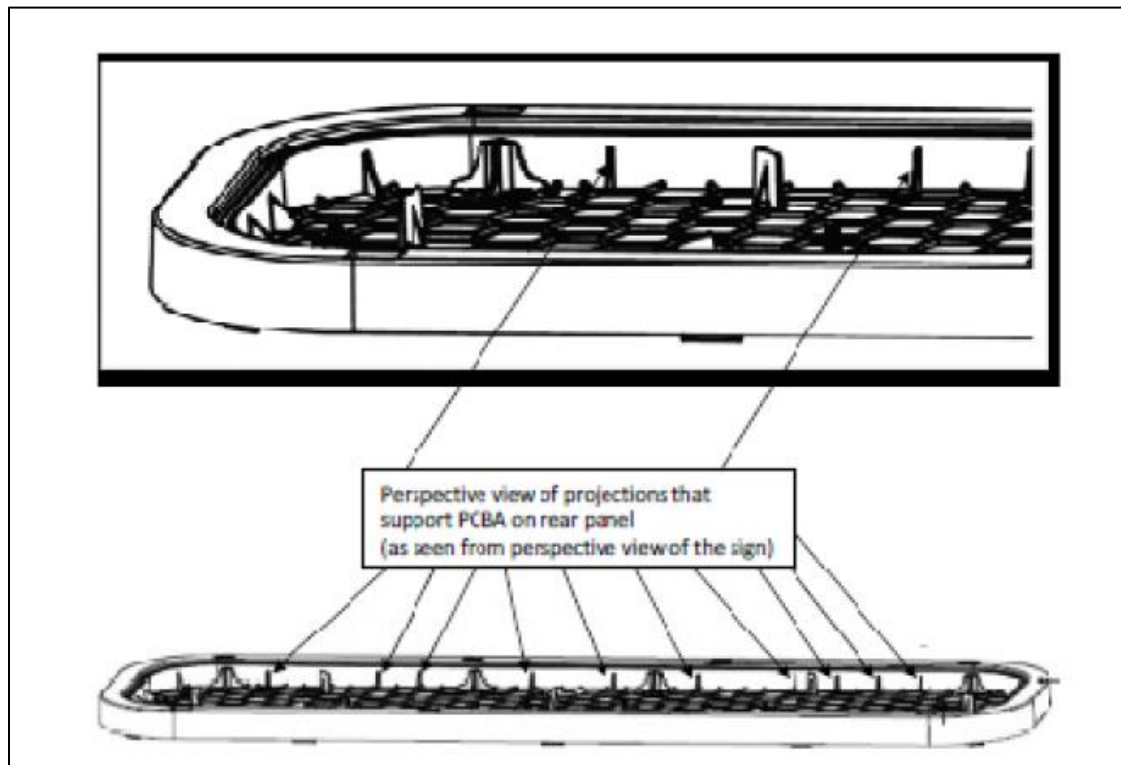
SMG contends that the sidewall of the plastic housing creates the space and should thus be considered the spacer. If that is true, then SMG has an argument for literal infringement as the spacer surrounds and supports the rear surface of the translucent panel.

However, OLI counters that “such spacing is achieved by first (shorter) and second (longer) projections extending up from the bottom panel,” where the shorter projections place the LEDs and the longer projections place the translucent panel, “such that the differen[ce] in axial

length . . . corresponds to the gap.” (*See* 491 Case, Def.’s Resp. to Pl.’s Mot. for Summ. J. 35.) A visual depiction of the different interpretations is as follows (SMG’s above, OLI’s below):



(491 Case, York Report ¶¶ 78.)



(491 Case, Carrier Report ¶ 55.)

This Court finds that what precisely creates the space between the LED panels and the translucent panel is a factual question that cannot be decided on summary judgment based on the evidence presented. Both interpretations are plausible from the drawings. Thus, drawing reasonable conclusions against the movant of each summary judgment motion, a genuine dispute of material fact exists.

Weather-tight seal. Claim 1 requires that “the entire perimeter of the translucent panel is sealed in a weather-tight manner by a weather-tight seal between the translucent panel and the spacer.” (491 Patent 23:4-6.) OLI’s infringement argument on this limitation is hard to discern. It appears to rely on its proposed construction of “weather-tight seal” to specifically mean silicone. (See Carrier Report ¶ 88 (“[w]hether or not the [accused product] includes this limitation is fully dependent on the meaning of “weather-tight seal[.]”).) This Court has rejected that construction and afforded “weather-tight” its ordinary meaning.

Further, OLI appears to have admitted its accused product literally infringes on this limitation. In a letter from then-counsel to SMG, OLI described its accused product as having a translucent panel “fixed/permanently bonded to the one-piece housing so as to fully [] weather-seal the large recess” (3/12/2022 Letter, ECF No. 27-10, PageID.619.) OLI does not offer a rebuttal to this fact.

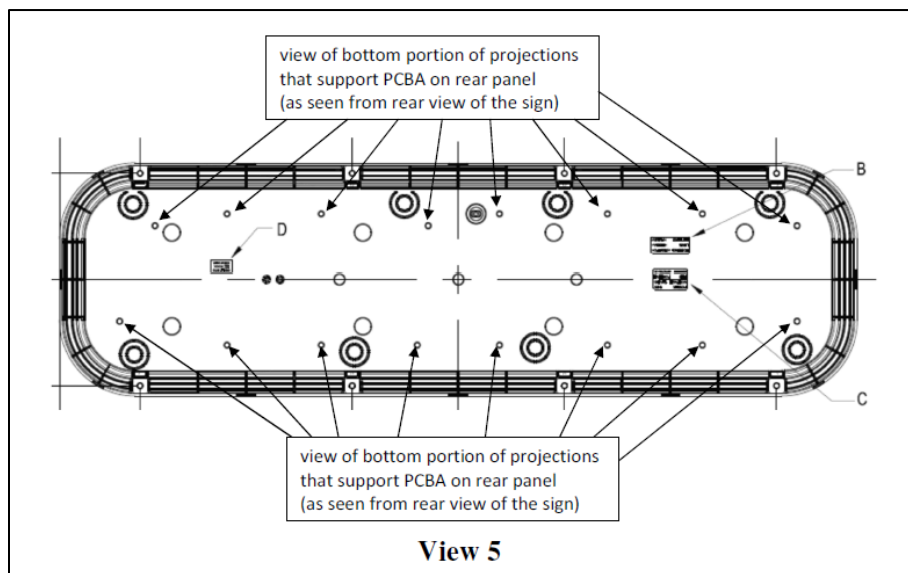
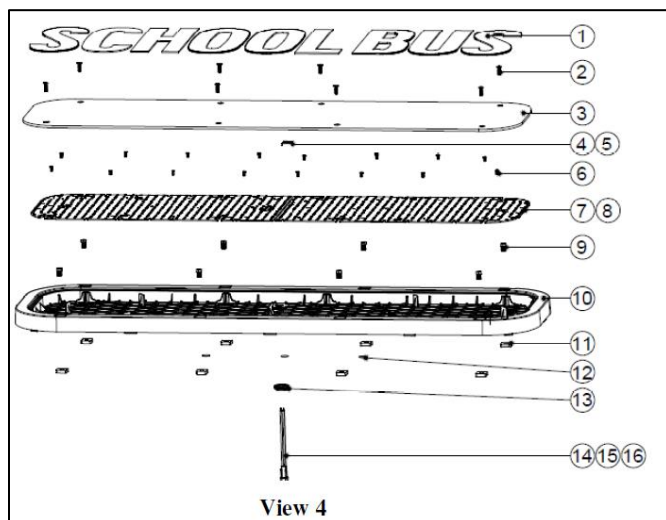
Here, no dispute of material fact exists. This Court finds the accused product literally infringes on the limitation requiring it be sealed in “weather-tight manner by a weather-tight seal.”

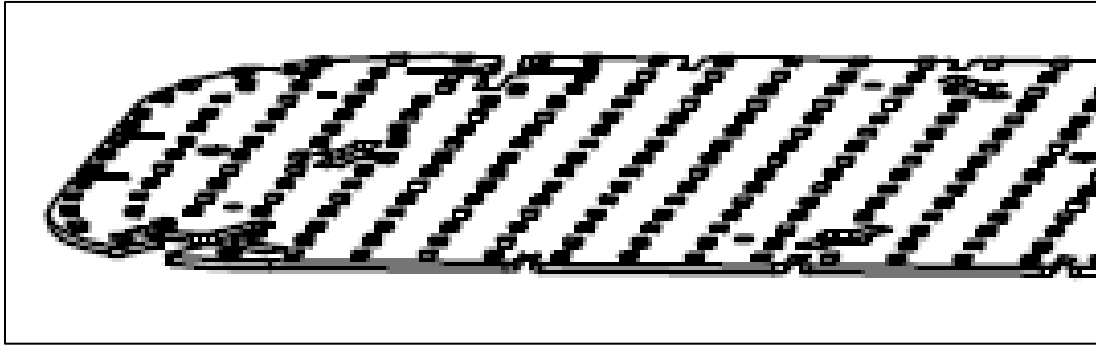
Dependent Claims 3, 5, and 6. SMG also moves for summary judgment on dependent claims 3, 5, and 6. OLI’s only counterargument is that these dependent claims cannot be literally infringed if the independent claim is not literally infringed. While correct as a pure legal matter, it is useful at summary judgment to resolve the issues that can be resolved. SMG may still be able to succeed under the doctrine of equivalents, and claims found to have been literally infringed will suffice for this theory. Thus, because the determination of literal infringement on these dependent claims will eventually need to be resolved, the Court will proceed to consider SMG’s motion.

Dependent claim 3 relates to the frame. The limitation reads “the sign of claim 1, wherein the frame comprised one or more through holes for direct mounting the sign to the school bus.”

(491 Patent 23:8-10.) Because claim 3 is directly dependent on a limitation in claim 1 that this Court finds has not been literally infringed, the accused product does not and cannot literally infringe claim 3.

Dependent claims 5 and 6 are a different matter. Both relate to the LEDs. These claims read “the sign of claim 1 wherein the LEDS are arranged in rows” (dependent claim 5) and “mounted to the rear panel” (dependent claim 6). (491 Patent 23:13-16.) The evidence in the record indicates that there is no dispute of material fact here. The LEDs are arranged in rows and mounted to the rear panel according to OLI’s own technical drawings:





(See Carrier Report, PageID.608; 491 Case, Technical Drawings, ECF No. 27-5, PageID.330 (image of LED components 7 and 8 from “view 4” above enlarged).)

Thus, this Court finds that dependent claim 3 is not literally infringed while dependent claims 5 and 6 are literally infringed.

Summary. This Court finds that OLI’s accused product does not literally infringe on Patent 491 because not every limitation is met. Specifically, the accused product does not meet the limitation requiring a “frame surrounding a perimeter of the translucent panel and forming a perimeter of the sign for mounting the sign to the school bus.” (491 Patent 22:62-64.)

(b) Infringement Under the Doctrine of Equivalents

SMG’s motion for summary judgment does not include infringement under the doctrine of equivalents. OLI’s motion broadly speaks to non-infringement and its brief in support argues non-infringement under the doctrine of equivalents. The Court will thus consider OLI’s motion and construe all reasonable inferences in favor of SMG.

“A device which does not infringe a patent claim literally may still infringe the claim under the doctrine of equivalents if each and every limitation is literally or equivalently present.” *CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1318-19 (Fed. Cir. 2000) (internal citations omitted). A limitation is “equivalently present in an accused device if there are only insubstantial differences between the limitation and the corresponding aspects of the device.” *Id.* (internal quotations omitted). “[I]nfringement by equivalents is an issue of fact ordinarily

preserved for the jury,” though courts are obliged to grant summary judgment if “no reasonable jury could determine two elements to be equivalent.” *Id.*

This doctrine is limited by a separate doctrine, the doctrine of prosecution history estoppel. Prosecution history estoppel doctrine “provides that a patent owner can be estopped from relying upon the doctrine of equivalents when the patent applicant relinquishes coverage of subject matter during the prosecution of the patent, either by amendment or argument.” This issue is a question of law. *Id.* (internal quotations and citations omitted).

OLI argues that the Supreme Court’s decision in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 525 U.S. 722 (2002), requires that “any substantive amendment made to the claims during prosecution, for any statutory reason, will raise a presumption that the patent owner is completely barred from the availability of any equivalents under the Doctrine of Equivalents.” (Def.’s Mot. for Summ. J. 18, ECF No. 30.) OLI overstates the application of this presumption. While *Festo* imposes a presumption, the substantive amendment must relate in some way to the limitation in order to trigger it. The text of the opinion is instructive:

This presumption is not, then, just the complete bar by another name. Rather, it reflects the fact that the *interpretation of the patent must begin with its literal claims, and the prosecution history is relevant to construing those claims.* When the patentee has chosen to narrow a claim, *courts may presume the amended text was composed with awareness of this rule and that the territory surrendered is not an equivalent of the territory claimed.* In those instances, however, the patentee still might rebut the presumption that estoppel bars a claim of equivalence. The patentee must show that at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent.

Festo, 535 U.S. at 741 (emphasis added). Thus, for the presumption to apply, the patent amendment must relate in some way to the “territory” encompassed by the limitation.

The Court has already found literal infringement on several limitations and has found a material dispute of fact on the limitation involving a spacer. Thus, the only limitation to which

the doctrine of equivalents applies at this stage is the one requiring a “frame surrounding a perimeter of the translucent panel and forming a perimeter of the sign for mounting the sign to the school bus.” (491 Patent 22:62-64.)

Doctrine of prosecution history estoppel. OLI does not point to any substantial amendment relating to the frame of Patent 491. The prosecution history reveals three amendments relating to frame. The first was to add the article “a” before frame. (491 Case, 491 Prosecution History, ECF No. 40-4, PageID.1645.) The second was to remove the modifier “single piece.” (*Id.*, PageID.1763.) Note, the single piece frame limitation later became dependent claim 3. (491 Patent 23:8-10.) The third was to remove a clause from the spacer limitation language noting “the frame having a thickness at least as thick as the space between the rear and translucent panels.” (491 Prosecution History, PageID.1777.)

OLI does not argue, and this Court does not find, that any of these amendments are “substantial” or that they in any way narrowed the relevant “territory” of the frame limitation. The first amendment is de minimis. The second amendment expanded, rather than narrowed, the scope of the limitation. The third amendment appears to have related more to removing extraneous verbiage from a limitation involving a different claim element. This too expanded, rather than narrowed, the frame limitation, if it had any effect at all.

At this summary judgment stage, OLI has not presented sufficient evidence that warrants a grant of its motion on the basis of the doctrine of prosecution history estoppel. Even if the presumption of *Festo* were to apply here, the Court finds that the prosecution history itself rebuts the presumption, and OLI should be allowed to proceed to argue infringement under the doctrine of equivalents.

Infringement under the doctrine of equivalents. The arguments and counterarguments surrounding the frame are, at this point, well known. While this Court found that the frame described in the 491 Patent was a distinct component, separate from the rest of the sign, there are certainly superficial similarities between the frame of the 491 Patent and the frame of the accused product.

The frame of the accused product, like the 491 Patent, surrounds the perimeter of the translucent panel and forms a perimeter of the sign for mounting the sign to the vehicle. The frame of the accused product, like the 491 Patent, allows for direct mounting via through-holes drilled into it. The primary difference, then, appears to be the integrality of the frame to the remainder of the sign. Whether this difference is substantial is a question for the jury.

At this stage, drawing all inferences in favor of SMG, this Court cannot conclude that no reasonable jury would find the accused product to be equivalent to the 491 Patent.

3. Invalidity

OLI asserts an affirmative defense of anticipation invalidity under 35 U.S.C. § 102, obviousness invalidity under § 103, and lack of written description invalidity under § 112(a). It moves for summary judgment for written description invalidity. SMG moves for summary judgment on anticipation and obviousness invalidity. Because a patent is presumed valid, 35 U.S.C. § 282, invalidity must be proven by an accused infringer by clear and convincing evidence, *Microsoft v. I4I Ltd.*, 564 U.S. 91, 95 (2011).

Relevant to all three invalidity contentions are three prior art references cited by OLI: U.S. Patent No. 2012/0036750 (491 Case, 750 Patent, ECF No. 32-1), U.S. Patent No. 6,698,118 (491 Case, 118 Patent, ECF No. 32-3), and an early prototype of its own sign held by its predecessor corporation, SoundOff CVS (491 Case, SoundOff prototype, ECF Nos. 66, 67). Notably, each of

these prior art references was disclosed in some form to the Patent and Trademark Office (PTO) during the 491 Patent approval process. (*See* 491 Patent 2).

(a) Anticipation

“A patent is invalid for anticipation if a single prior art reference discloses each and every limitation of the claimed invention.” *Schering Corp. v. Generva Pharms.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003). Anticipation is a question of fact. *Cheese Sys., Inc. v. Tetra Pak Cheese & Powder Sys., Inc.*, 725 F.3d 1341, 1347 (Fed. Cir. 2013). OLI only asserts invalidity for anticipation if the “Court were to adopt the broad meanings of the claim terms ‘a frame’ or ‘a spacer’ being asserted by the plaintiff[.]” (491 Case, Def.’s Resp. to Pl.’s Mot. for Summ. J. 45.) Further, OLI cites only the SoundOff Prototype as anticipating the 491 Patent.

With the Court’s construction of “frame,” OLI is unable to make a prima facie case of invalidity for anticipation. The SoundOff Prototype prior art reference does not disclose a frame as used in the claimed invention. Even without the Court’s construction of “frame,” OLI does not show how its use of the sign, either via tradeshow or a YouTube video, constitutes public disclosure of the applicable limitations. There is no evidence indicating a public disclosure of the internal components of the sign, nor is there an explanation as to how a person of ordinary skill in the art would “inherently” anticipate such limitations absent express disclosure. *See Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047 (Fed. Cir. 1995) (explaining claim anticipation may either be express or inherent, with anticipation by inherency occurring where it would be appreciated by one of ordinary skill in the art). Summary judgment for SMG is appropriate.

(b) Obviousness

Invalidity for obviousness is a question of law, “based on underlying factual findings,” including “(1) the scope and content of the prior art; (2) the level of ordinary skill in the pertinent art; (3) the differences between the claimed invention and the prior art; and (4) evidence of

secondary factors” *Cheese Systems*, 725 F.3d at 1347-48, 1352. The secondary factors are objective considerations that “protect against the prejudice of hindsight bias” in an obviousness analysis. *Id.* at 1352. This objective evidence “can include copying, long felt but unsolved need, failure of others, commercial success, unexpected results created by the claimed invention, unexpected properties of the claimed invention, licenses showing industry respect for the invention, and skepticism of skilled artisans before the invention.” *Id.*

Like anticipation, OLI notes that it only asserts an obviousness defense under § 103 if the Court were to adopt SMG’s preferred constructions. Indeed, because the Court has construed “frame” as a separate and distinct component, it is that much more difficult for OLI to make the required showing of invalidity for obviousness.

Furthermore, OLI does not appear to meet SMG’s contention that it has failed to make a prima facie case for obviousness invalidity. Rather, it notes in reply that “it is [OLI’s] position that . . . the admissible evidence of record shows that the [OLI] sign utilizes a three component that is prior art to the 491 Patent as it was widely used in many illuminated signs and lights in the US years before the effective filing date of the 491 patent.” (491 Case, Def.’s Resp. to Pl.’s Mot. for Summ. J. 46.) If this is the evidence OLI relies on, it falls short of the evidence required. OLI has not produced evidence of widespread use of the three-component structure. It cites only the SoundOff prototype. Nor has OLI produced evidence of the appropriate person ordinarily skilled in the art. Nor has OLI produced evidence of any secondary, objective factors.

The Court agrees with SMG that OLI has failed to adduce the required evidence sufficient to prove to a jury by clear and convincing evidence that the 491 Patent is invalid for obviousness. Summary judgment for SMG is appropriate.

(c) Written Description and New Matter

OLI argues that the claim limitations regarding “spacer” and “weather-tight seal” were improperly added as “new matter” during the patent approval process and thus invalid under 35 U.S.C. § 132. Further, OLI argues that these limitations lack written description support and are thus invalid under 35 U.S.C. § 112(a). It moves for summary judgment on these contentions. This Court is not persuaded.

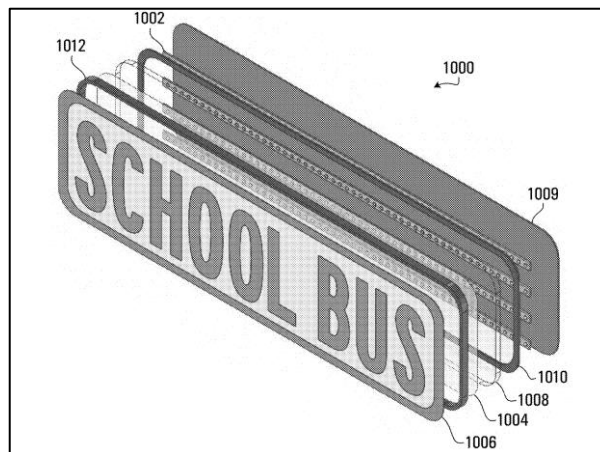
With respect to OLI’s new matter argument, it bears emphasizing that the PTO approved the 491 Patent after considering the relevant amendments. The PTO considers whether an amendment impermissibly contains new matter, and thus “[i]mplicit in the action of the Patent Office in permitting the amendment, is a determination that the amendment does not contain new matter within the meaning of [§ 135] and this determination is presumptively correct.” *Reeves Bros. v. U.S. Laminating Corp.*, 282 F. Supp. 118, 130 (E.D.N.Y. 1968), *aff’d*, 417 F.3d 869 (2d Cir. 1969); *see also R.E. Phelon Co. v. Wabash, Inc.*, 640 F. Supp. 1383, 1401 (N.D. Ind. 1986), *rev’d on other grounds*. Historically, courts have viewed matter as new when it “involve[s] a departure from or [an] addition to the original disclosure,” and not new when it is “something that might fairly be deduced from the original application.” *Stearn v. Superior Distrib. Co.*, 674 F.2d 539, 544 (6th Cir. 1982) (internal quotations omitted).

There appears to be very little current binding (or even persuasive) precedent in this area, and OLI points to none. Nor does OLI convince this Court that the PTO erred in approving the patent in light of these amendments. The amendments relate solely to the actual claims of the patent, not to the drawings or specifications. Thus, so long as spacer and weather tight can arguably be fairly deduced from the specifications and drawings, OLI cannot successfully challenge the validity based on new matter.

This observation dovetails into OLI's challenge on written description under § 112. Indeed, the predecessor to the Federal Circuit, the Court of Customs and Patent Appeals, noted that "[t]he proper basis for rejection of a claim amended to recite elements thought to be without support in the original disclosure . . . is [§] 112 . . . not [§] 132." *See In re Rasmussen*, 650 F.2d 1212, 1214 (C.C.P.A. 1981).

"A determination that a patent is invalid for failure to meet the written description requirement of 35 U.S.C. § 112[a] is a question of fact" *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1355 (Fed. Cir. 2010). "[T]he test . . . is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Id.* at 1351. Like many aspects of patent law, written description is analyzed in the context of a "skilled reader of the patent disclosure[.]" *Alcon Rsch. Ltd. v. Barr Lab'ys, Inc.*, 745 F.3d 1180, 1191 (Fed. Cir. 2014).

OLI has three arguments, none of which is supported by evidence as to how a person ordinarily skilled in the art would read the patent disclosures. First, OLI argues that the limitation in the claim that the spacer "surrounds" the LEDs is unsupported by the specifications. Specifically, it notes that Figure 32 of the 491 Patent does not depict a spacer "surrounding" the LEDs because no full spacer (items 1008 and 1010 in the image below) is fully visible:



(491 Patent, PageID.276.) But a patent specification need not “spell out every detail of the invention,” *LizardTech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1345 (Fed. Cir. 2005), nor “describe the claimed subject matter in precisely the same terms as found in the claims at issue,” *Technology Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1331 (Fed. Cir. 2008). At this stage, it cannot be said that a skilled patent reader would inevitably fail to understand the depicted spacers as “surrounding” the LEDs simply because the figure is only partially visible. OLI’s first argument fails.

Second, OLI argues that the limitation that the spacer “supports” a rear surface of the translucent panel (figure 1006 in the image above) along its “entire perimeter” is unsupported by the specifications. The “entire perimeter” argument is plainly contradicted by the visual depiction of Figure 32 of the 491 Patent. For the “supports” argument, OLI appears to rely on the lack of direct contact between the spacer and the translucent panel as being fatal to the challenged limitation. OLI cites neither case law nor evidence relating to how a person ordinarily skilled in the art would support this contention. SMG’s expert counters that a person ordinarily skilled in the art would understand that contact is not required for support; it also cites case law rejecting interpretations similar to OLI’s. SMG has at least presented sufficient evidence to raise a genuine dispute, and OLI falls short of meeting its clear and convincing evidence burden. OLI’s second argument fails.

Third, OLI argues that the weather-tight seal “between” the translucent panel and spacer, surrounding the “entire perimeter” of the panel is unsupported by the specifications. Without reference to a person ordinarily skilled in the art, it is somewhat difficult to understand how OLI views the specifications as failing to support the limitation. The relevant specification itself reads “[i]n some embodiments, a silicone seal encloses the edge of the sign unit between the layers and

prevents dust and moisture from penetrating the unit,” referencing figure 1012 in the above image. Together, the drawing and written description depict a weather-tight seal (figure 1012) between the translucent panel (figure 1006) and spacer (1008), whose dimensions appear to surround the entire perimeter of the panel. This matches the claim language, a point also made by SMG’s expert. Thus, SMG has at least presented sufficient evidence to raise a genuine dispute. Again, OLI fails to meet its burden, and its third argument fails.

(d) Summary

OLI has failed to produce sufficient clear and convincing evidence to succeed on its invalidity claims. SMG’s motion for summary judgment for anticipation and obviousness invalidity will be granted, and OLI’s motion for summary judgment for written description will be denied.

4. Plaintiff’s Motion to Dismiss Defendant’s Second and Third Counterclaims

OLI counterclaims on the 491 Patent, alleging SMG violated federal and state antitrust laws and committed tortious interference. SMG moves for a dismissal of both counterclaims for failure to state a claim under Rule 12(b)(6). OLI did not file a response, and the time to do so has passed.

(a) Violation of Antitrust Laws

OLI alleges violations of both federal and state antitrust laws. 15 U.S.C. § 2 *et seq.*; Mich. Comp. Laws § 445.778(2). Because Michigan’s antitrust statute “mirrors” the federal one, courts “apply the same analysis to both federal and state antitrust claims.” *Hobart-Mayfield, Inc. v. Nat’l Operating Comm. on Standards for Athletic Equip.*, 48 F.4th 656, 663 (6th Cir. 2022). This Opinion will discuss in terms of the federal analysis.

OLI alleges SMG violated federal antitrust laws in two ways. First, SMG allegedly threatened and ultimately pursued the instant legal action when it knew its patent was invalid

and/or that the accused device did not infringe. Second, SMG allegedly contacted “at least one” of OLI’s customers to try to convince them to cut off their business relationship in light of the alleged patent infringement. (See 491 Case, Def.’s Answer ¶¶ 14, 19-20, 23.)

SMG argues that OLI has failed to state a claim for its antitrust counterclaims for several reasons, each of which is individually sufficient to dismiss on a 12(b)(6) motion. SMG avers that OLI failed to identify the relevant product market, allege antitrust standing, or conducts violative of the antitrust laws.

The Federal Circuit has exclusive jurisdiction over “any civil action in which a party has asserted a compulsory counterclaim arising under[] any Act of Congress relating to patents.” 28 U.S.C. § 1295. “[A]ntitrust claims premised on the bringing of a patent infringement suit” are “decided as a question of Federal Circuit law.” *NobelPharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1068 (Fed. Cir. 1998). However, the Federal Circuit “appl[ies] the law of the appropriate regional circuit to issues involving other elements of antitrust law such as relevant market, market power, damages, etc., as those issues are not unique to patent law[.]” *Id.*

OLI brings its antitrust counterclaim primarily under § 2 of the Sherman Act, 15 U.S.C. § 2. Section 2 prohibits illegal monopolization of a market for which a claimant must show “(1) possession of monopoly power in the relevant market; and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident.” *Static Control Components, Inc. v. Lexmark Int’l, Inc.*, 697 F.3d 387, 402 (6th Cir. 2012) (internal quotations omitted).

A claimant must also “first demonstrate that it has standing,” a requirement which “is more onerous than the conventional Article III inquiry.” This is a “threshold, pleading-stage inquiry

and when a complaint by its terms fails to establish this requirement [district courts] must dismiss it as a matter of law.” *Id.*

Relevant market. Plaintiffs must “identity the relevant product and geographic markets so the district court can assess ‘what the area of competition is, and whether the alleged unlawful acts have anticompetitive effects in that market.’” *Total Benefits Plan. Agency, Inc. v. Anthem Blue Cross & Blue Shield*, 552 F.3d 430, 437 (6th Cir. 2008) (quoting *Brown Shoe Co. v. United States*, 370 U.S. 294, 324 (1962)). While courts are hesitant to grant motions to dismiss on such a fact-intensive inquiry, *see, e.g., United States v. Blue Cross Blue Shield of Michigan*, 809 F. Supp. 2d 665, 672 (E.D. Mich. 2011), plaintiffs must still plead enough facts to establish the proposed boundaries of the relevant market, *see Total Benefits*, 552 F.3d at 437. If there is no identification of the competitors in a given market or the scope of the products and services on which they compete, a court “must dismiss the case for failure to state a claim.” *See id.*

OLI does not attempt to define either the relevant product or geographic market in its counterclaim. It asserts “SMG possesses monopoly power in a defined relevant market” and no more. (*See* 491 Case, Def.’s Answer ¶ 17.) This is the sort of “threadbare recital[] of the elements of a cause of action, supported by mere conclusory statements” that falls short of pleading standards. *Iqbal*, 556 U.S. at 678. The Court is left with no clues as to the geographic scope of the alleged market, the types of products on which the parties compete, or whether the parties are the only competitors in the market. OLI’s counterclaim must be dismissed for this reason alone.

Antitrust standing. The Court “decides whether a claimant has adequately pleaded antitrust standing by balancing five factors[,],” none of which controls:

- (1) the causal connection between the antitrust violation and harm to the plaintiff and whether that harm was intended to be caused;
- (2) the nature of the plaintiff’s alleged injury including the status of the plaintiff as consumer or competitor in the relevant market;
- (3) the directness or indirectness of the

injury, and the related inquiry of whether the damages are speculative; (4) the potential for duplicative recovery or complex apportionment of damages; and (5) the existence of more direct victims of the alleged antitrust violation.

Static Control, 697 F.3d at 402. To simplify, these factors focus on the nature of the injury (factors (1), (2), and (3)), the relief sought (factors (3) and (4)), and the nature of competition within the market (factors (2) and (5)).

Evaluating these factors on OLI's complaint alone is a difficult task. Without a relevant product market or an identification of the market's relevant players, the Court has scant information to analyze. However, there is enough to make a determination as to "antitrust injury, which is a 'necessary but not always sufficient,' condition of antitrust standing." *NicSand, Inc. v. 3M Co.*, 507 F.3d 442, 450 (6th Cir. 2007) (quoting *Cargill, Inc. v. Monfort of Colo., Inc.*, 479 U.S. 104, 110 n.5 (1986)). To properly plead standing, an antitrust claimant must show that the conduct complained of is an "antitrust injury, which is to say injury of the type the antitrust laws were intended to prevent and that flows from that which makes the defendants' acts unlawful." *Id.* (internal quotations omitted). The antitrust laws were intended to protect "competition not competitors." *Brown Shoe*, 370 U.S. at 320. Thus, "even though a claimant alleges that an injury is causally related to an antitrust violation, it will not qualify as an antitrust injury unless it is attributable to an anticompetitive aspect of the practice under scrutiny." *NicSand*, 507 F.3d at 451.

There are two major problems for OLI on its antitrust injury (a component of factors (1), (2), and (3)). First, OLI fails to plead sufficient facts that allow an inference of injury to competition as a whole rather than to OLI as a competitor. Both actions alleged by OLI evoke an individualized injury to OLI, but OLI fails to suggest how those actions harm competition in addition to the competitor. *See Care Heating & Cooling, Inc. v. Am. Standard, Inc.*, 427 F.3d 1008, 1014 (6th Cir. 2005) ("Individual injury, without accompanying market-wide injury, does

not fall within the protections of the Sherman Act.”). Second, most of what OLI complains of is protected by the *Noerr-Penington* doctrine. This point is discussed further below.

Without an adequately pleaded antitrust injury, OLI has failed to establish antitrust standing. OLI’s claim must also be dismissed for this reason.

SMG’s Alleged Conduct. SMG argues that both of its alleged anticompetitive actions, the instant lawsuit and customer communication, are shielded from antitrust liability as a matter of law.

Regarding the lawsuit, the *Noerr-Penington* doctrine recognizes a First Amendment right to petition the courts for redress from harm and thus, as a general matter, filing a lawsuit is immune from antitrust liability. *Eastern R.R. Presidents Conference v. Noerr Motor Freight, Inc.*, 365 U.S. 127, 144 (1961); *Calif. Motor Transp. Co. v. Trucking Unlimited*, 404 U.S. 508, 510 (1972). In the patent context, an exception to this immunity is recognized when “the alleged infringer (the antitrust plaintiff) proves (1) that the asserted patent was obtained through . . . fraud . . . or (2) that the infringement suit was a mere sham[.]” *Nobelpharma*, 141 F.3d at 1068; *see also Static Control*, 697 F.3d at 408. Thus, to overcome *Noerr-Penington* immunity, OLI must plead adequate facts that permit an inference of fraud or a sham lawsuit.

OLI alleges both. It alleges the 491 Patent was fraudulently obtained and that SMG “kn[ew] or should [have known] that the claims . . . are invalid and/or that the Accused device does not infringe.” (491 Case, Def.’s Answer ¶¶ 16, 40.) With respect to fraud, OLI falls short of the *Twombly/Iqbal* pleading standards, even without considering the heightened pleading standards under Rule 9(b). In fact, it does not identify any of SMG’s alleged conduct as fraudulent and instead merely asks for a declaration of fraud in its prayer for relief. The closest it comes to alleging some issue in the patent approval process is when it argues that SMG’s application

impermissibly introduced new matter. But there are no allegations that SMG withheld information from the PTO, or somehow duped it into approving their application. OLI simply has not pleaded sufficient facts to draw an inference of fraud, and thus cannot defeat *Noer-Pennington* immunity on this basis.

For a lawsuit to be a sham, it “must be both subjectively brought in bad faith and based on a theory of either infringement or validity that is objectively baseless . . . [;] if a suit is not objectively baseless, antitrust defendant’s subjective motivation is immaterial.” *Nobelpharma*, 141 F.3d at 1072 (citing *Pro. Real Est. Invs., Inc. v. Columbia Pictures Indus, Inc.* (PRE), 508 U.S. 49, 60-61 (1993)); *see also Static*, 697 F.3d at 408).

Even without referencing the lack of a (12)(b)(6) motion on infringement or the preceding discussion in this Opinion to show that SMG’s lawsuit is not “objectively baseless,” OLI fails to plead enough facts in its counterclaim to support such an inference. It asserts that its product does not infringe and points to specific challenged elements, but these challenges to SMG’s suit do not support an inference that the suit is “objectively baseless.” So long as an “objective litigant could conclude that the suit is reasonably calculated to elicit a favorable outcome, the suit is immunized under *Noerr*[.]” *PRE*, 508 U.S. at 60-61 (internal citations omitted). At most, OLI has shown that it thinks it can win, not that SMG knows it cannot.

The other conduct that OLI alleges as a violation of the antitrust laws is the threat to “one or more school bus manufacturers” that the purchase of an OLI product will result in being blacklisted from purchasing SMG products. This appears to be an allegation of a vertical restraint on trade, as it deals with a manufacturer, SMG, threatening to cut off business dealings with one or more customers. But “a manufacturer has a right to select its customers and refuse to sell its goods to anyone, for reasons sufficient to itself.” *Care Heating & Cooling*, 427 F.3d at 1013. In

fact, this sort of vertical restraint is per se legal, because “nonprice vertical restraints rarely tend to restrict competition and decrease output.” *Id.* (quoting Dep’t of Just., Vertical Restraints Guidelines, § 2, 50 Fed. Reg. 6263 (1985)). OLI does not allege sufficient facts to warrant further scrutiny of this vertical restraint, like the presence of exclusive dealing arrangements or territorial restrictions. *See id.* at 6264.

Without an allegation of conduct that falls afoul of antitrust laws, OLI cannot sustain an antitrust counterclaim. OLI’s counterclaim must also be dismissed for this reason.

Summary. OLI has failed to state a claim for three independent reasons. It has failed to define the relevant product market, establish antitrust standing, or plead conduct sufficient to establish a violation of the antitrust laws. This Court will grant SMG’s motion to dismiss OLI’s antitrust counterclaim.

(b) Tortious Interference

OLI alleges SMG committed tortious interference when it “intended, by its conduct, to interfere in [its relationships with school bus manufacturers] by attempting to convince [OLI]’s known or potential customers to not do [] business with [OLI].” (Def.’s Answer ¶ 33.) It also cites SMG’s violation of antitrust laws as an act constituting tortious interference. (*Id.* ¶ 34.) OLI does not specify which state laws or common law it brings this counterclaim under, so this Court will apply Michigan’s choice-of-law rules as required when exercising supplemental jurisdiction. *See Felder v. Casey*, 487 U.S. 131, 151 (1988).

“In a tort action, Michigan courts recognize a presumption in favor of . . . [the] appl[ication] of Michigan law unless a rational reason to do otherwise exists.” *Standard Fire Ins. Co. v. Ford Motor Co.*, 723 F.3d 690, 693 (6th Cir. 2013). Whether a rational reason exists is a two-step test, which results in “Michigan courts . . . us[ing] another state’s laws where the other state has a significant interest and Michigan has only a minimal interest in the matter.” *See Hall*

v. General Motors Corp., 582 N.W.2d 866, 868 (Mich. 1998). Here, neither party alleges facts that would indicate a foreign state has a greater interest than Michigan. OLI is incorporated in and conducts business in Michigan while SMG is a Canadian corporation. SMG placed the conduct that forms the basis of the underlying patent action in Michigan, and any counter-injury done to OLI would impact a Michigan company. Clearly, Michigan's interest in preventing tortious interference with its companies is a strong one. Michigan tort law is thus the appropriate choice of law.

In Michigan, the elements of tortious interference with business relationships are:

(1) the existence of a valid business relationship or expectancy that is not necessarily predicated on an enforceable contract, (2) knowledge of the relationship or expectancy on the part of the defendant interferer, (3) an intentional interference by the defendant inducing or causing a breach or termination of the relationship or expectancy, and (4) resulting damage to the party whose relationship or expectancy was disrupted.

Courser v. Allard, 969 F.3d 604, 620-21 (6th Cir. 2020) (citing *Health Call of Detroit v. Atrium Home & Health Care Servs., Inc.*, 706 N.W.2d 843, 849 (Mich. 2005)). The third element is often the focus and requires that “one who alleges tortious interference . . . must allege the intentional doing of a per se wrongful act or the doing of a lawful act with malice and unjustified in law for the purpose of” the interference. *Adamo Demolition Co. v. Int’l Union of Operating Eng’rs Loc. 150, AFL-CIO*, 3 F.4th 866, 874 (6th Cir. 2021) (citing *Derderian v. Genesys Health Care Sys.*, 689 N.W.2d 145, 157-58 (Mich. 2004)). A per se wrongful act is “an act that can never be justified under any circumstances.” *Id.* (quoting *Prysak v. R.L. Polk Co.*, 483 N.W.2d 629, 635 (Mich. 1992)).

Thus, to survive a motion to dismiss, OLI must have pleaded sufficient facts that would allow an inference of improper motive of an otherwise legal act (*i.e.*, malice) or an inference that the alleged act is never justified under any circumstances. See *Wausau Underwriters Ins. Co. v.*

Vulcan Dev., Inc., 323 F.3d 396, 404 (6th Cir. 2003) (citing *Feldman v. Green*, 360 N.W.2d 881, 891 (Mich. 1994)). It has failed to do so.

First, OLI argues that SMG's alleged anticompetitive behavior amounts to tortious interference. Because OLI has failed to state a claim under antitrust laws, its dependent tortious interference claim must also fail. To put this point in terms of Michigan tort law, because OLI could not plead sufficient facts that permit an inference that SMG has violated antitrust laws through fraud, a sham lawsuit, and/or vertical restraints on competition, it has not pleaded sufficient facts that permit an inference of either a per se wrongful act or a lawful act done with malice. Thus, the only remaining tortious interference claim is SMG's attempt to convince OLI's customer(s) to not do business with OLI.

There is no indication that merely contacting a customer is itself illegal or per se wrongful. OLI's claim must thus rely on improper motive. On its face, SMG's actions appear to have been motivated by a desire to protect its intellectual property by refusing to do business with customers it views as purchasing infringing products. This would preclude finding malice. "Where the defendant's actions were motivated by legitimate business reasons, its actions would not constitute improper motive or interference." *Id.* Regardless of the ultimate outcome of this case, OLI has not shown that SMG's lawsuit to protect its intellectual property is objectively baseless. Thus, other actions seeking the same result are similarly not objectively baseless. Further, OLI has failed to plead facts that would permit an inference that it can "demonstrate, with specificity, affirmative acts by [SMG] that corroborate the improper motive of the interference." *SAAB Auto. AB v. Gen. Motors Co.*, 770 F.3d 436, 443 (6th Cir. 2014) (affirming dismissal of a Michigan tortious interference claim on a 12(b)(6) motion).

OLI has failed to state a claim for tortious interference under Michigan common law. It has failed to allege sufficient facts that would permit an inference that SMG's conduct was either per se wrongful or lawful but maliciously motivated. This Court will grant SMG's motion to dismiss OLI's tortious interference counterclaim.

V. CONCLUSION

For the reasons stated above, the Court will: (1) deny OLI's motion for summary judgment on non-infringement and invalidity of the D930 Patent, (2) deny SMG's motion for summary judgment on evidentiary issues related to invalidity of the D930 Patent, (3) grant in part and deny in part OLI's motion for claim construction for the D491 Patent, (4) deny SMG's motion for summary judgment on infringement of the 491 Patent, (5) grant in part and deny in part OLI's motion for summary judgment on infringement of the 491 Patent, (6) grant SMG's motion for summary judgment on invalidity of the 491 Patent, (7) deny OLI's motion for summary judgment on invalidity of the 491 Patent, and (8) grant SMG's motion to dismiss OLI's second and third counterclaims in the 491 Case for failure to state a claim.

An order will enter consistent with this Opinion.

Dated: September 28, 2023

/s/ Hala Y. Jarbou

HALA Y. JARBOU

CHIEF UNITED STATES DISTRICT JUDGE